

DOCUMENT RESUME

ED 355 759

FL 020 660

AUTHOR Liddicoat, Anthony, Ed.
TITLE Bilingualism and Bilingual Education. NLIA Occasional Paper No. 2.
INSTITUTION Australian National Languages Inst., Melbourne.
REPORT NO ISBN-0-646-04405-2
PUB DATE 91
NOTE 240p.
PUB TYPE Books (010) -- Collected Works - General (020)

EDRS PRICE MF01/PC10 Plus Postage.
DESCRIPTORS *Bilingual Education; *Bilingualism; Cognitive Development; *Cultural Context; Elementary Secondary Education; Emotional Development; Foreign Countries; *Individual Development; Language Acquisition; Psycholinguistics; Social Influences; Sociolinguistics
IDENTIFIERS Australia

ABSTRACT

Following an introduction by Anthony Liddicoat on the general nature of bilingualism, three papers on the characteristics, development, and advantages of bilingualism are presented. "Psycholinguistic Aspects of Bilingualism" by Susanne Dopke, Tim Macnamara, and Terry Quinn considers the linguistic, cognitive, emotional, and educational development of the bilingual individual and the social psychology of bilingualism. "Sociolinguistic Aspects of Bilingualism: Bilingualism and Society" by George Saunders looks at bilingualism in its social context and the linguistic and social factors influencing attainment and maintenance of bilingualism. Emphasis here is on the situation of bilinguals in Australia. "Bilingual Education" by Marta Rado focuses on bilingual education as an effective way of developing bilingualism. Much of the discussion here is relevant to language teaching and describes models for bilingual education used in major English-speaking countries. (Contains approximately 300 references.) (MSE)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED355759

BILINGUALISM AND BILINGUAL EDUCATION

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as
received from the person or organization
originating it.
- ☐ Minor changes have been made to improve
reproduction quality.

- Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Josepn
LeBlanc

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

FL020660

**BILINGUALISM
AND
BILINGUAL
EDUCATION**

**EDITORIAL WORK BY ANTHONY LIDDICOAT
RESEARCH AND PUBLICATIONS OFFICER
NATIONAL LANGUAGES INSTITUTE OF AUSTRALIA**

**NATIONAL LANGUAGES INSTITUTE OF AUSTRALIA
MELBOURNE**

1991

NLIA Ocassional Paper N° 2

Copyright © 1991 National Languages Institute of Australia



National Languages Institute of Australia
Level 3
112 Wellington Parade
East Melbourne Victoria 3002
Australia

ISBN 0 646 04405 2



CONTENTS

Preface	i
<i>J. Lo Bianco</i>	
Bilingualism: An introduction	1
<i>A.J. Liddicoat</i>	
Psycholinguistic aspects of bilingualism	21
<i>S. Döpke, T.F. McNamara & T.J. Quinn</i>	
Sociolinguistic aspects of bilingualism:	
Bilingualism and Society	81
<i>G. Saunders</i>	
Bilingual education	141
<i>M. Rado</i>	
References	199

PREFACE

The three commissioned chapters in this book owe their origins to a specific incident. In a small country town a primary and secondary school, through the persistent advocacy of some committed parents and teachers decided to embark on an ambitious bilingual education initiative. The language the school community selected was Italian, chiefly because it was the most widespread language other than English in the local community.

The community was actually quite pessimistic about receiving any support from the Education Department on whose positive response the entire initiative rested. Some months after lodging a detailed submission requesting appropriate staffing – a submission packed with belief in the cultural and educational worthiness of bilingual education – many of the supporters were surprised to receive a positive reply. The teachers would be supplied, the materials requested would be funded and other support was offered.

The programme was to commence in the next school year on a small trial basis with a view to full-scale adoption in a subsequent year. After declaring to the local media the success of the submission, the proposers, flushed with surprise over their success were to be even more surprised. The bilingual programme was subjected to a sustained campaign of opposition, which eventually defeated it altogether.

The prime reason for the opposition was, apparently, doubt about the educational effects of bilingual education, though, sadly, less acceptable features played a part. In response to this experience, which is by no means unique or rare, teachers, community leaders and others continually called for "definitive statements" about bilingual education and its effectiveness and the Australian Advisory Council on Languages and Multicultural

Education (AACLAME) commissioned three studies tailored to the perceived areas of difficulty in the case mentioned above:

- (i) concerns from parents and teachers about the effects on children's **educational performance** when learning *in* two languages;
- (ii) concerns expressed by the public at large and by school communities about **social** questions raised by embarking on bilingual education; and
- (iii) concerns from school administrators and educational officials about the **organizational** issues involved in bilingual education.

AACLAME's response was to seek out experts to review Australian and overseas research and expertise responding to these questions. From these papers, two pamphlets were produced and distributed to Australian schools. The pamphlets are:

Bilingualism: Some sound advice for parents

Bilingualism: Who? What? Where?

The National Languages Institute of Australia (NLIA), as the body entrusted with further development and implementation of the National Policy on Languages was asked to see through the publication of the papers from this project. This project is, therefore, meant to provide active support for bilingual education in schools by making available the evidence for its benefits. The decision to embark on a bilingual programme can, of course, come from a vast array of economically and humanistically inspired motivations. This book, however, demonstrates that the linguistic sciences also provide incontrovertable support for bilingual education.

JOSEPH LO BIANCO
Chair AACLAME
Director NLIA

BILINGUALISM: AN INTRODUCTION

Anthony Liddicoat

National Languages Institute of Australia

What is Bilingualism?

It is not easy to formulate a generally accepted definition of bilingualism. Bilingualism means different things to different people. Bloomfield (1933:56) defined bilingualism as 'native-like control of two languages'. However, this definition excludes many people who speak more than one language but do not have 'native-like' control of one or both of their languages. A large number of people who use two languages regularly may not have 'native-like' control of one of their languages. It is clear that Bloomfield's definition of bilingualism needs to be modified if it is to reflect accurately the reality of people's ability to use languages.

The existence of large numbers of people who speak more than one language but who do not exhibit native-like control in both languages, raises the question of how proficient a person must be to be classed as bilingual. Haugen (1953:7) suggests that bilingualism begins 'at the point where a speaker of one language can produce complete, meaningful utterances in the other language'. Diebold (1961) has even suggested that bilingualism has commenced when a person begins to understand utterances in a second language, but is unable to produce utterances.

Bilingualism may be defined as having some ability to use two (or even more) languages. There can, therefore, be degrees of bilinguality – at one extreme there are those people who have

2 Introduction

native-like control over two languages and at the other extreme are those people who have just begun to acquire a second language.

Degrees of bilingualism can be assessed in the individual's command of the four skills of listening comprehension, speaking, reading comprehension and writing in each language. Some children in immigrant communities, for example, have all four skills only in the official language of their country of residence while in their parents' language they have only the oral skills of listening comprehension and speaking. In addition, people who are bilingual in all four skills can have different levels of skill in each language. For example, a Vietnamese speaking child educated in English may have a better command of written English than of written Vietnamese, even if the child's spoken Vietnamese is better than his/her spoken English.

Grosjean (1982) points out that we need to consider a holistic view of bilingualism. The linguistic abilities of bilinguals have often been compared to those of monolingual speakers of the languages concerned. The bilingual, however, should not be considered as the sum total of two complete or incomplete monolinguals. The presence of two languages and their interaction in the bilingual produces a different but complete language system which responds to the individual's needs to communicate using one or other language or, in some settings, a mixture of both languages.

How common is bilingualism?

Bilingualism is present in most countries throughout the world, in all classes of society and in all age groups. However, the importance of bilingualism in the world is not widely recognized, particularly in countries which view themselves as monolingual. Lewis (1978) stated that 'bilingualism has been and is nearer to the normal situation than most people are willing to believe'.

In some border areas between two language groups, economic and social factors lead many people to use more than one language on a regular basis. Thus, in Europe people who live near in a

country like Belgium may live in a Flemish speaking area and work in a French speaking area. For people such as these, there is a practical need to speak both the language of the region in which they live and the region in which they work.

The pattern of bilingualism is different in different societies. For example countries with indigenous linguistic minorities may be bilingual, but bilingualism is normal only in the minority community. Thus native speakers of Welsh in Wales normally speak both Welsh and English and native speakers of Ainu in Japan usually speak Japanese as well as Ainu. However, few native speakers of English speak Welsh and few native speakers of Japanese speak Ainu. In some countries, bilingualism is more widespread through out the population. In Paraguay, for example most people speak both Spanish and Guaraní. In countries where many different languages are in contact, most people speak one or two of their neighbours' languages and often a lingua franca as well. Thus, in Papua New Guinea many people living in rural areas speak two or more languages often including a pidgin, such as Tok Pisin or Hiri Motu, which is used for communicating with people over a wider area.

Immigration can lead to the establishment of bilingual communities in the host country. Immigrants coming from countries speaking a language different from that of the country in which they settle need to acquire the language of their host country and so they become bilingual speaking both their own language and the language of the host country. These people may in turn transmit both languages to their children and ensure the survival of the bilingual community. This is a typical pattern of bilingualism in Australia. According to the 1986 census, 13.6% of Australians over the age of five speak a language other than English at home (Clyne 1988).

Types of bilingualism

The study of bilingualism has tended to develop dichotomies. Among the more commonly used dichotomies are the distinctions

4 Introduction

between compound and co-ordinate bilingualism (Weinreich 1953), simultaneous and successive bilingualism (McLaughlin 1984), additive and subtractive bilingualism (Lambert 1975), elite and folk bilingualism (Skutnabb-Kangas 1981). These distinctions have had an important function in drawing attention to various aspects of bilingualism but at the same time they represent different approaches to the question of bilingualism.

Co-ordinate and compound bilingualism

Ervin and Osgood (1954) distinguished between *compound* and *co-ordinate* bilingualism according to differences in cognitive functioning. Compound bilingualism involves two sets of linguistic signs which become associated with a single set of meanings. Co-ordinate bilingualism involves a set of translation equivalents in the two languages which correspond to two different sets of representations (See Figure 1.1). The distinction between these two types of bilingualism involves a difference in cognitive organization of linguistic material in the brain – it does not in itself indicate a difference in competence. Co-ordinate bilingualism tends to be developed through an experience of different contexts in which the two languages are rarely interchanged, whereas compound bilingualism tends to be developed through contexts

<i>Compound bilingualism</i>	<i>Co-ordinate bilingualism</i>
L1 'family' ↘ single concept: ↙ <i>family/famille</i>	L1 'family' ⇔ concept <i>family</i>
L2 'famille'	L2 'famille' ⇔ concept <i>famille</i>

Figure 1 Schematic representation of the compound co-ordinate distinction. Adapted from Ervin & Osgood (1954)

in which the two languages are rarely interchanged, whereas compound bilingualism tends to be developed through contexts such as formal language learning in school or continual switching from one language to another.

Simultaneous and successive bilingualism

McLaughlin (1984) maintains that when a child learns two languages simultaneously it is inappropriate to talk about the child's first and second languages. Both languages are in effect first languages, although one may dominate in certain situations or with certain people. For McLaughlin, simultaneous bilingualism could occur at any age less than a cut-off age of three years. Therefore, a 2 year old Portuguese speaking child who moves to Australia and begins to acquire English would be considered to be acquiring both languages simultaneously. McLaughlin felt that below the age of three, the child's first language was not yet established but that after the age of three the child has had a considerable head start in acquiring one language and is establishing first language patterns. It can no longer be considered that the child is acquiring both languages simultaneously.

When a language is acquired after the first language is established, McLaughlin talks of successive acquisition. In this case, the first and second languages can be clearly differentiated and the added language is learned as a second language. Thus, a Tagalog speaking child who moves to Australia from the Philippines at the age of four and a half will already have acquired a large amount of Tagalog as a first language, when this child is exposed to English s/he will begin learning it as a second language.

Simultaneous acquisition of two languages is not necessarily superior to successive acquisition and both patterns of acquisition can lead to bilingual competence. A child's bilingual ability does not so much depend on how early a language is introduced as on

6 Introduction

other factors such as the relative prestige of the languages, cultural factors and opportunities for use. For example, a child who acquires two languages simultaneously may lose one of those languages when contact with that language is lost whereas a child who has acquired two languages successively but has continued contact with both languages may become a balanced bilingual.

Additive and subtractive bilingualism

Lambert (1975, 1977) drew attention to the close association between bilingualism and the social psychological mechanisms involved in language behaviour. In particular, the relative social status of each of the bilingual person's languages and the person's perception of the difference in status has an important function in the development of bilingualism. Lambert distinguishes two types of bilingualism – *additive bilingualism* and *subtractive bilingualism*.

Additive bilingualism develops when both languages and the culture associated with them bring complementary positive elements to the child's overall development.

Subtractive bilingualism, however, develops when the two languages are competing rather than complementary. Such competition occurs when the minority language is being replaced by the more dominant and prestigious language of the majority group. Lambert (1977:19) states that the level of bilingualism achieved will 'reflect some stage in the subtraction of the ethnic language and the associated culture, and their replacement with another'. Subtractive bilingualism results, for example, when a child is educated in the more prestigious language without appropriate support for his/her home language in the education programme.

Elite and folk bilingualism

Skutnabb-Kangas (1981) uses a distinction between *elite bilinguals*, who acquired their second language through formal education with some opportunity to use the language naturally and *folk bilinguals* who acquired their second language through practical contact with speakers of that language.

Elite bilinguals typically become bilingual through a free choice to learn a language. Elite bilingualism has always been highly valued and considered a form of cultural enrichment and a mark of learning and intelligence. The risk associated with failing to learn the second language is small and is equal to the consequences of failing in any other area of curriculum. Students who do not excel in language studies are usually able to discontinue the area of study and concentrate their attention on other subject areas.

Folk bilingualism, however, has frequently been stigmatized and has often been associated with educational controversies related to the integration of minority children into the majority society. It is not, however, the type of bilingualism or the way a language is acquired that are the cause of problems in education for folk bilingual children but rather a combination of social and other factors.

Folk bilinguals are typically members of linguistic minority groups and are subject to strong external pressure to learn the dominant language. As such, they are forced by circumstances to become bilingual in their own language and in the dominant language. Their home language is often unvalued in the wider community and usually has limited or no official status. Failure to acquire the dominant language adequately can have drastic repercussions for these children. A child whose second language skills are limited is usually excluded from further educational opportunities and will be unable to compete in the labour market with children who are fluent in the dominant language. Such a

8 Introduction

child will face restrictions on his/her access to the life of the larger community.

Folk bilinguals may also suffer difficulties due to the education system's lack of support for speakers of non-dominant languages. These children frequently enter classes taught in a language they do not speak, and often find themselves in the same class as native speakers of the dominant language. Moreover, for many speakers of minority languages, general educational prospects for successful learning and for their acquisition of the dominant language are dependent to some extent on the continued development of their first language and of the conceptual basis they have already gained. If the education system does not assist children in this development, the result can be severe educational difficulties for these children

Balanced bilingualism

Balanced bilingualism has a range of meanings for different writers. For Haugen (1973) a balanced bilingual is an individual who has native-like competence in both languages. More frequently, however, the term is used to refer to an individual who has roughly equal ability in both languages. This would mean that someone whose performance was imperfect in both languages would still be a balanced bilingual if his/her skills in each language were about the same.

Most bilinguals are usually *dominant* in one language or the other, although they may not be dominant in the same language in all areas as the example of the Vietnamese speaking child given above indicates. Often, there are domains of language use in which people use only one of their two languages. For example, an Arabic-English bilingual in Australia may use only English at work or at school, but would normally use Arabic at home or with friends. As a result, this person would have a more developed vocabulary for work and school in English and a more developed vocabulary for domestic activities in Arabic. This person could be

better able to talk about work in English and better able to talk about cooking in Arabic.

Is bilingualism an advantage or a disadvantage?

The question of the advantage or disadvantage of bilingualism, particularly for children, has been subject to much controversy.

Much early writing on bilingualism has concentrated on what were believed to be the detrimental effects of bilingualism. For example, Jespersen (1922) maintained that the bilingual child hardly learns either language as well as such a child would have learned a single language. Moreover, he claims that the intellectual effort needed to master two languages diminishes the child's ability to learn other things.

These early studies were largely based on the intuitions of the writers concerned, but experimental studies were also produced which seemed to bear out such opinions. Saer (1923) surveyed 1,400 Welsh school children in five rural and two urban schools and concluded that bilingualism led to lower intelligence. However, Saer failed to consider other factors which may have contributed to his results, such as possible differences in social class between bilingual and monolingual students. In fact, Saer found that lower scores in intelligence tests applied only for children in rural schools and that bilingual students in urban schools scored slightly better on his tests than monolinguals.

It appears that in Saer's study, urban bilinguals had more contact with the second language, English, both in school and outside school than did their rural counterparts. The urban students would, therefore, be more balanced bilinguals than the rural students and could perform at a level similar to monolingual students on verbal intelligence tests.

In 1962 Peal and Lambert published the results of a study in which they aimed to overcome the flaws in research design which characterized earlier studies. Peal and Lambert surveyed 10 year old children in urban public schools in Montreal, Canada. These

10 Introduction

children were assessed on a range of cognitive, affective, and language use variables and profiles were developed which equated groups for factors such socio-economic group, parental education. Controlled groups of monolinguals and balanced bilinguals were then compared and the bilinguals were found to be significantly ahead of their monolingual counterparts in verbal and non-verbal reasoning, divergent thinking and subject matter attainment. Bilingual ten year olds also tended to be further advanced in the school system than monolingual ten year olds.

These findings have since been confirmed by a number of studies which have shown bilinguals to be more creative, cognitively more flexible and to perform better on tests of verbal and nonverbal intelligence.

In an important follow up study to Peal and Lambert (1962), Lambert and Tucker (1972) evaluated monolingual English speaking children enrolled in French language immersion classes in Canada and compared their findings with matched control groups of monolingual English speaking children instructed in English and monolingual French speaking children instructed in French. The children in the three groups were matched in kindergarten for social class variables and non-verbal intelligence and were evaluated for five consecutive years. At the end of this period, testing the three groups revealed the following:

1. Children in the immersion class did not suffer any impairment in their English language ability as a result of instruction in a second language and performed at the same level as monolingual English speaking children educated in English.
2. The immersion group matched the French speaking group in their performance in areas such as vocabulary, listening comprehension and knowledge of French concepts. They were, however, poorer at oral expression, in rhythm, intonation and overall expression when retelling short stories in French, but these factors improved when they

were telling an original story in French. Overall, the immersion children had quite similar abilities to those of the French control group.

3. The performance of the immersion class in non-language subjects such as mathematics which were taught in French was at the same level as the French speaking group.

The findings of studies such as Lambert and Peal (1962) and Lambert and Tucker (1972) have prompted much research focussed on whether bilingual children have a greater ability to manipulate language or have a greater awareness of language than monolingual children. Ianco-Worrall (1972) conducted two experiments comparing South African bilingual English - Afrikaaner children with monolingual English or Afrikaaner speakers. In one of these experiments children were given a 'standard' word followed by two 'choice' words. One of the choice words was phonetically related to the 'standard' word the other was semantically related. Bilingual children chose the semantic equivalent more frequently than monolingual children. In the other experiment a word substitution task was used to determine the extent to which children would accept the interchange of names for objects. These experiments revealed that bilingual children were aware of the arbitrary nature of names at an earlier age than monolingual children and that bilingual children were more attentive to the semantic relationship between words than were monolingual children who focussed more on phonemic relationships.

Cummins and Mulcahy (1978) gave a test similar to Ianco-Worrall's to students in a bilingual Ukrainian-English programme. They chose three groups: bilingual students who spoke Ukrainian at home and were judged to be fluent in both languages, students who spoke little Ukrainian at home and who were judged to be learners of that language and monolingual English speakers. The results of this test did not confirm Ianco-Worrall's finding that bilingual children were more semantically oriented than

12 Introduction

monolingual children. In fact, they found that, at Grade 1 level, the children learning Ukrainian as a second language were considerably more phonemically oriented than monolinguals. This difference was found to disappear at the Grade 3 level.

It is necessary, therefore, to account for the differences in findings between Ianco-Worrall (1972) and Cummins and Mulcahy (1978). It appears that at the initial stages of exposure to a second language phonemic features of words are more salient than semantic features, but as competence increases in the second language, phonetic discrimination becomes less of a problem and syntactic and semantic analysis is more necessary for understanding linguistic input. Ianco-Worrall's sample had been exposed to both English and Afrikaans in the home from an early age and appear to have advanced beyond the stage where phonetic discrimination was necessary and were concentrating more on semantic features. Cummins and Mulcahy's students, and in particular the second language learners, had not yet reached the same stage in their language development and were more dependant on phonetic information.

Research into bilingualism has also looked for evidence that bilingual children also show cognitive advantages over monolingual children in areas other than metalinguistic awareness. Landry (1974) reported cognitive enrichment as the outcome of elementary school language programmes in the United States. In this study, children were tested in first, fourth and sixth grades using the Torrance Test of Creative Thinking and were tested for figural and verbal flexibility, fluency and originality. Sixth grade bilingual children were found to perform significantly better on all tests than monolinguals, but the effect was less for fourth grade children and non-existent for first grade children.

Cummins and Gulutsan (1974) tested bilingual and monolingual children on aspects of memory, reasoning and

divergent thinking. They found that bilinguals demonstrated greater verbal ability, performed better on measures of concept formation and scored higher on tests of verbal originality than did monolinguals. Monolinguals performed better than bilinguals when recalling abstract words, but otherwise there was no difference in ability to perform memory tasks.

In another study, Kessler and Quinn (1987) compared bilingual and monolingual eleven year-olds who were involved in an inquiry-based science program during which they learned to formulate scientific hypotheses in a problem-solving setting. Bilinguals were found to perform better than monolinguals in both the quality of hypotheses. This was taken as an indication of enhanced cognitive creativity due to the bilingual language proficiency. Kessler & Quinn (1987) found that bilingual children demonstrated a much higher level of convergent thinking by making greater use of metaphors. Whereas divergent thinking entails generating a large number of possible solutions to a problem, convergent thinking involves focussing in on disparate objects and ideas, relating them to each other.

Research into bilingualism has also demonstrated social benefits which are connected to bilingualism. Lambert and Tucker (1972) indicate that children who learn a second language at school experience positive social development. These children tend to adopt a dual reference group maintaining anchors to the primary reference group of their original language and culture and at the same time developing anchors in the secondary reference group of the new language and culture. Children who learn a second language can, therefore, add to their existing social repertoire without compromising their existing social integration. Genesee (1987) has shown that children who acquire a second language tend to be more open-minded and more tolerant than their monolingual counterparts. Genesee (1987) also found that these children tend to have a better sense of their interlocutors'

14 Introduction

communicative needs than do monolinguals.

It would be simplistic, however, to say that all bilingualism leads to cognitive and social advantages. Cognitive and social advantage from bilingualism is linked in particular to additive bilingualism. Under favourable social conditions where both languages are valued and reinforced, bilingualism may have positive effects on the cognitive process and on social attitudes. Under adverse social conditions in which the child's home language is under valued and is not reinforced through the education system, bilingualism may impede cognitive and social development.

Bilingual education

In the literature on *bilingual education* the term is used to describe a variety of education programmes involving two or more languages to varying degrees. In Australia's National Policy on Languages (Io Bianco 1987:155) bilingual education was defined as a programme in which 'two languages are used as media of instruction. The content of instruction includes some of the curriculum in both languages over time'. This definition insists on the use of two languages as media of instruction. It does not include curricula, such as those found in many Australian schools, in which a second language is taught as a subject, but is not used elsewhere in the curriculum. Second language instruction, however, is frequently a part of bilingual programmes.

Under this definition, bilingual programmes may be one of four types (see Hamers and Blanc 1989):

1. *transitional bilingualism* in which first language is used only to facilitate the transition to the second (official) language;
2. *mono-literate bilingualism* where the school uses two

- languages for most of its activities but uses only one language (the second language) to introduce literacy skills;
3. *partial biliterate bilingualism* in which both languages are used for all four language skills, but in which academic subjects are divided in such a way that the first language is used for 'cultural subjects' such as arts, folklore, history and the second language is used for 'technical subjects' such as science and economics.
 4. *total bi-literate bilingualism* in which all language skills are developed in both languages in all domains.

Bilingual education aims to foster the child's abilities in both languages. Recent research in the field of second language acquisition have shown that the first and second language are complementary rather than mutually exclusive. Research has shown that time spent on the first language does not detract from the development of the second language but rather that greater first language proficiency results in more efficient second language development. For example, in a study conducted over three years, Hakuta (1987) found a pattern of increasing correlation between Spanish and English vocabulary scores in several groups of Puerto Rican children in bilingual programmes. Cross-sectional studies also report high levels of correlation between children's abilities in both their languages (Cummins 1984, Snow 1987). The fact that older children are more efficient learners of language than younger children has been suggested as further evidence that strong first language skills result in better second language learning (Hakuta 1990b).

Cross-language transfer of skills

A fundamental assumption which underlies bilingual education is that skills and knowledge acquired in one language are easily transferred to another. Thus, a child who learns about a scientific

16 Introduction

concept in Russian would be able to transfer this knowledge to English, or any other language, without having to relearn the concept, as long as he/she has access to the available vocabulary. Lambert and Tucker (1972) in their review of Canadian French immersion programmes observed that the high order skills such as reading and calculating which were developed exclusively through French seemed to be simultaneously developed in English. They also observed that this transfer of skills occurred very rapidly. However, transfer of lower level literacy skills may be more delayed when the transfer is between languages which have different scripts.

The notion of the transfer of skills is also supported by research in cognitive science. Goldman, Reyes and Varnhagen (1984) showed that bilingual children employ similar comprehension strategies when listening to the same stories in two languages. This study indirectly showed that higher order cognitive processes were independent of a specific language. Malakoff (1988) demonstrated that French-English bilinguals performed similarly on analogical reasoning tasks in each of their languages. In addition, much research into adult bilinguals' memory for lists of words has shown that in general content transcends language (Arkwright and Viau 1974, Gekoski 1980). In effect, when people learn a concept or skill, they form an understanding of the concept or skill that is independent of the specific language in which the concept is presented, even though the act of learning can draw on that language to regulate thinking.

Given that skills do transfer across languages it is possible that transfer could occur either on a specific skill-by-skill or concept-by-concept basis or it could involve the transfer of a entire structure of skills or concepts in a domain. Hakuta (1990a) taught first grade students in a bilingual programme concepts in the area of spatial and temporal relation in Spanish and assessed the extent to which the transfer of these concepts to English was

holistic or componential and concluded that the transfer of skills was holistic and depended on the child's general proficiency in his/her first language rather than on the specific set of skills which were taught.

From this brief overview, it can be seen that the large amount of research that has been done in recent years on bilingualism and bilingual education has led to a deeper understanding of bilingualism. It is obvious that bilingualism is appreciated as being a far more complex phenomenon which has social, intellectual and other dimensions. Bilingualism has come to be seen as a resource to be developed through education rather than as a problem to be overcome.

About this book

This book contains three papers on the processes and advantages of bilinguals which were collected as part of the Australian Second Language Learning Programme's Bilingualism Project in which some of Australia's experts in the field of bilingualism were requested to review the available research. Apart from these papers, the project has also produced two brochures which give brief overviews of the project. These brochures are:

Bilingualism: Some sound advice for parents which is intended for parents raising their children bilingually, and

Bilingualism: Who? What? Why? which is directed at teachers and educational decision-makers exploring and implementing bilingual programmes.

The chapter by Susanne Döpke, Tim Macnamara and Terry Quinn considers psycholinguistic aspects of bilingualism from (1) the perspective of individual psychology; in particular, it discusses aspects of the linguistic, cognitive, emotional and educational development of the bilingual individual; and (2) from the perspective of social psychology.

18 Introduction

The authors demonstrate that, with respect to the linguistic development of bilingual children, the limited evidence so far does not support the popular view that bilingual children are delayed or disturbed in their linguistic development, but rather suggests that bilingualism *per se* is not causing any developmental delays which may exist.

They stress that there is no need for concern about language mixing. In part, language mixing is a function of normal language learning behaviour, also observed in monolingual children; in part it is due to mixed input. The former will sort itself out with time, the latter needs to be attended to by the bilingual speakers in the environment. If code switching is the norm in a particular bilingual community, then this needs to be regarded as a sociolect particular to and important for this community. Mixed output in the minority language may also be due to a developmental lag between minority and majority language, with the child getting used to substituting missing items in the minority language with equivalents from the majority language. Once this habit has settled in, it may inhibit the further development in the minority language.

It appears that bilingual children generally pass through similar sequences in the development of both their languages as do monolingual children. To what extent the separation of the two languages is due to psycholinguistic or sociolinguistic factors is not quite clear yet. The fact that language separation can be externally motivated, however, points towards the Independent Development Hypothesis.

George Saunders' paper examines bilingualism in relation to its social context and looks at both the linguistic and social factors which influence the attainment and maintenance of bilingualism.

The paper begins by looking at the languages other than English which are spoken in Australia and the ways in which the numbers of speakers of various language are either increasing or decreasing. Some communities are maintaining their languages well, other communities, however, are facing rapid shift to English.

There are a number of social factors which influence language maintenance and language shift. These social factors include the frequency of intermarriage between members of different linguistic communities, lack of information or misinformation about the influence speaking another language may have on their children's acquisition of English or their cognitive development, and people's awareness of the normal course of bilingual development. In addition, factors such as the nature of family ties and the cohesiveness of the linguistic community, the availability of a language at school, the international status of the minority language, the ability to read and write both the minority language and the dominant language and the availability of community language media all have a role to play in the maintenance or loss of a minority language.

Contact between minority languages and English in Australia leads to change in the form of the minority language spoken in Australian ethnic communities and this paper reviews some of the findings on language change. This paper stresses that language change is both inevitable and natural. The notion of language *transference*, or the influence one language has on another, (Clyne 1967) is a particularly important aspect of language change in Australia. Lexical, semantic, grammatical, phonological, prosodic, graphemic and pragmatic transference from English is present to a greater or lesser extent in the speech and writing of almost all speakers of languages other than English in Australia.

It is also natural for bilinguals to *code switch* or switch from one language to another for part of a sentence or conversation. Code switching is not a sign of linguistic incompetence and a wide body of research has shown that, in fact, the opposite is usually the case. Moreover, code switching normally occurs only in conversation with bilingual interlocutors and rarely impedes communication.

Marta Rado's paper focuses on bilingual education as an effective way of developing bilingualism. Much of the discussion,

20 Introduction

therefore, is relevant to language teaching as such, whether it be English as a Second Language or languages other than English as first or second languages.

The paper discusses various bilingual education models implemented overseas, particularly in Canada, the United Kingdom and the United States and looks at the models used in the bilingual education scene in Australia.

There is currently much planning across the states in the language teaching field. There is an obvious need for planning to ensure the stability and continuation to higher levels of language learning/bilingual education programs and to encourage the integration of language programmes into school curricula. This will require a co-ordinated development of bilingual teaching methodology and the establishment support services on national and state levels for all language learning/bilingual education programme providers.

Some bilingual education programmes are also operative, but these are mostly in the primary as opposed to the postprimary sector. The lack of bilingual programmes in the post-primary sector is a matter of concern. If bilingual education is to be of lasting value, it must be supported throughout the whole language development period which reaches into post-adolescence.

An important contribution of this chapter is the presentation of rationales, guidelines, objectives and recommendations to show how educational authorities, tertiary institutions and members of the school community can enhance the effectiveness of language teaching and bilingual education throughout the whole period of schooling.

PSYCHOLINGUISTIC ASPECTS OF BILINGUALISM

S. Döpke, T.F. McNamara and T.J. Quinn
Linguistics and Language Studies
University of Melbourne

Introduction

As a result of continuing large-scale immigration into Australia, bilingualism is an ever-clearer reality in Australia. To a society which has traditionally perceived itself as monolingual, accepting bilingualism as 'normal' and catering for the needs of bilingual families poses difficulties. To parents who are, for the first time in their lives, in a situation where their mother tongue is not the language of the society at large, deciding on the right course of action in relation to their children's upbringing produces a great deal of anxiety.

This paper will consider psycholinguistic aspects of bilingualism from two perspectives: the psychology of the individual and social psychology.

After a description of the linguistic development of bilingual children, we present research comparing bilingual and monolingual children with respect to cognitive development. Following that, the emotional importance of speaking the parents' language and reasons for bilingual children's relatively high rates of school failure will be discussed. The role of attitude and motivation in language maintenance and loss as well as in the acquisition of a second language will be discussed in the context of social identity theory. The paper will conclude with suggestions

for recommendations.

Linguistic development

With respect to bilingual children's linguistic development, the following three questions appear to be most often asked by parents and educators:

- Do bilingual children acquire language at a slower rate than do monolingual children?
- Should we be worried about bilingual children's mixing of their two languages?
- Is the developmental path altered due to the dual language acquisition?

In the following, an answer to each of these three questions will be attempted.

Rate of language development in bilingual children: To date, few studies have looked directly into the rate of bilingual children's linguistic development and compared it to that of monolingual children. Doyle et al. (1978) asked mothers of thirteen children who were bilingual in English and French and thirteen mothers of monolingual children between the ages of 1;5 and 3;6 at what age their children uttered their first words. The groups were matched for dominant language, age, sex, status of their non-verbal development and socio-economic status of parents. The average age at which they uttered their first word was reported as 11.2 months for the bilingual group and 12.0 months for the monolingual group. The difficulties which mothers would have had with recalling their children's onset of speech can be assumed to have been the same for both groups of subjects. Hence, distorting or subjective factors are not likely to have biased one group more than the other. Extensive language testing of both groups showed that neither Taylor's (1974) speculations concerning bilingual children's slower development of higher order concepts nor Ben-Zeev's (1972) suggestion that bilingual children concentrate

more on the structural development of their two languages than on the lexical development could be supported. However, vocabulary development in the dominant language might be slightly delayed due to a relative lack of input in areas in which the second language is the medium of communication. This does not affect the total size of the bilingual child's vocabulary, which is usually comparable to, if not bigger than, that of monolingual children.

With respect to structural development, Swain (1972) argued that certain grammatical structures are delayed in bilingual children. Swain (1972) did a case study of question formation in two bilingual French-English subjects. The children were exposed to the two languages according to the principle of one parent-one language. The subjects ranged in age from 3;2 to 3;9 and 4;0 to 4;5, respectively. The results suggested that the formation of wh-questions might be delayed in bilingual children by a few months as compared with the development of monolingual children.

Padilla and Lindholm (1976) provided some counter-evidence to Swain (1972). They studied the development of interrogatives, negatives and possessives in the speech of nineteen bilingual Spanish-English children, ranging in age from 2;0 to 6;4. For each child a minimum of 400 utterances per language were recorded. The results indicated that negatives and possessives were acquired at much the same time in both languages and at a comparable rate with monolingual subjects. Interrogatives tended to be acquired earlier in Spanish than in English. The authors argued that, in contrast to negatives and possessives which require equal numbers of transformations in English and Spanish, Spanish interrogatives undergo two successive transformations whereas English interrogatives undergo three transformations. The rate of the development of interrogative structures in English and Spanish appeared yet again to be *en par with* that of monolingual children of English and Spanish, respectively. However, this study was not specifically designed for the comparison of bilingual

and monolingual children.

In an earlier study, Padilla and Liebman (1975) compared the rate of linguistic development of three bilingual Spanish/English children with that of monolingual children by Mean Length of Utterance (MLU). They compared their subjects' MLU growth with that of Brown's (1973) subjects and found them to be comparable. During the early stages of first language acquisition MLUs are generally taken as an indication of the level of structural development.

Case studies of bilingual children have generally stated that the children's acquisition of the language of the wider community was in no way affected by the simultaneous acquisition of a minority language. (Leopold 1939-1949; Taeschner 1982; Kielhofer and Jonekeit 1983; Porsche 1983; Fantini 1985; Hoffmann 1985; Saunders 1982, 1988). However, the use of the minority language has often been reported as halting and semantically and idiomatically less varied than monolingual children's language use (Saunders 1982; Taeschner 1983). Case studies have commonly involved middle class families only.

Regrettably, the question of whether bilingual children develop language at the same rate as monolingual children or are, as is commonly believed, relatively slower in that respect has not been answered yet, nor has it attracted sufficient interest among researchers in the field. Due to the wide range of developmentally normal language behaviour in monolingual children at any one age, only large scale comparisons of monolingual and bilingual children will ultimately answer this question.

The related concern about linguistic confusion or stuttering suffered by bilingual children also lacks support. Rather than being a developmental problem, stuttering in bilingual children is believed to be an attitudinal problem caused by adults (Dodson 1983; Saunders 1988). In a paper on causes of stuttering by Johnson (1967), bilingualism was not even mentioned. Instead, he found that the perception of age-related disfluencies like the

onset of stuttering were the most potent cause for long term stuttering problems. Saunders (1988) argues that bilingual children's language development tends to be more closely monitored than that of monolingual children and developmental delays and divergencies are often given undue importance.

In summary, the limited evidence so far does not support the popular view that bilingual children are delayed or disturbed in their linguistic development, but rather suggests that bilingualism *per se* does cause developmental delays.

Language mixing: Language mixing and interference between the two languages tend to cause concern to parents and educators. The mixing of elements from both languages on the word or sentence level and switching from one language into the other at the constituent level or sentence boundary are often taken as evidence that the child is overburdened by the simultaneous acquisition of two languages.

Research reports vary with regard to the extent of interference found in bilingual children's speech. This is due to the varying ages of the subjects (1;5 to 6;0 years of age), the direction of interference examined (minority language interfering in production of majority language or vice versa), and the range of interferences studied (lexical, syntactic, semantic, morphological, phonological), as well as environmental conditions such as lack of language separation by parents.

Some agreement has been reached with respect to the decreasing frequency of interference with the increasing age of the child. The debate as to the cause of this has, however, not been settled yet. While some researchers maintain the view that early mixing is due to the child's lack of equivalents for lexical items in the two languages (Padilla and Liebman 1975; Bergman 1976; Lindholm and Padilla 1977, 1978; Pye 1986), the majority of studies seems to present evidence that, during the initial stage, the child develops only one lexicon, which contains elements from both languages (Leopold 1954; Totten 1960; Imedadze 1967;

Oksaar 1973; Swain and Wesche 1975; Volterra and Taeschner 1978; Redlinger and Park 1980; Taeschner 1983; Vihman 1985, 1986). The major argument for the one-system theory over the two-system theory (Redlinger and Park 1980; Arnberg 1987) rests on the observation that young bilingual children apparently try to attach quite distinctive meanings to lexical equivalents. For example, Volterra and Taeschner's (1978) subject Lisa insisted for a while that the Italian word for glasses referred to her father's reading glasses and that the German word for glasses referred to glasses which her mother had drawn for her on a piece of paper once. Similarly, the Italian word for mirror was reserved for the mirror in the bedroom and the German word for mirror denoted the mirror in the bathroom.

Most researchers agree that there is hardly any interference on the phonological level (Leopold 1947; Raffler-Engel 1956; Taeschner 1983), the structural area which presents the least cognitive challenge to the language learner (Cummins and Swain 1986:88). Deviations and variations in pronunciation are usually similar to those found in monolingual children (Leopold 1947, 1949; Ruke-Dravina 1965).

Morphological interferences have not been studied very much in child bilingualism; the few studies that have been done have found that morphological interference is rare (Burling 1959; Foster-Meloni 1978; Taeschner 1983; Döpke in prep.). Taeschner (1983:175) suggested that "their purpose is to make the lexical interferences conform to the language in which they are inserted".

Semantic interference refers to the over-extension of a semantic concept in one language to a familiar but not identical semantic concept in another language. Closely related languages are more susceptible to this kind of interference than are more divergent languages. Taeschner (1983) found that semantic interference was rare in her bilingual Italian/German subjects.

Syntactic interference is probably the type of interference which occurs most often after lexical interference. Taeschner

(1983:183) argued that "the form they take can be traced to the way in which sentences are planned in the other language. Since the sequence of a sentence just said or heard is still fresh in the child's mind, and since this sequence forms a perceptive Gestalt, the child is merely replacing items from lexicon A with items from lexicon B, and leaving the structure intact". Another type of syntactic interference is due to the child still being in the process of separating the two syntactic systems. Volterra and Taeschner (1978) argued that separation on the syntactic level is accomplished only after the languages have been separated on the lexical level.

The amount of interference found in bilingual children as reported in various studies ranges from 2-3% (Lindholm and Padilla 1977) to around 30% (Taeschner 1983), depending on the age of the child and the area of interference under observation. Generally, language mixing and interference are *perceived as* occurring more frequently than is actually the case.

Dodson (1983) argued that bilingual children's acquisition strategies need to be seen relative to monolingual children's acquisition strategies. Monolingual children, too, have preferred words, and avoid those which are difficult to pronounce or just less appealing to them. The bilingual child simply has a greater range to choose from: instead of choosing between *bow wow* and *dog*, he/she can choose between *bow wow*, *dog*, *wau wau*, and *Hund*, for example. Preferred words from two languages easily lead to mixed structures at an early age. Just as the monolingual child may say *bow wow gone* or *dog gone*, the bilingual child can say those two or *Hund weg* or *dog weg*, or any of the other combinations.

Semantic over-extensions are very common in young monolingual children and are believed to be a necessary developmental step in the child's acquisition of his/her first language (E. Clark 1979). Qualitatively they are not different from semantic interferences in young bilingual children.

Syntactic interferences resemble the monolingual child's

strategies of imitating chunks of just heard sentences and integrating them into his/her own linguistic productions (R. Clark 1974, 1977), as in the following example cited in Taeschner (1983:184):

Adult: We're all very mucky.

Child: I all very mucky, too.

A number of scholars have found evidence that the process of separating the two languages depends on how consistently the languages are used in the child's immediate environment. Language mixing by the parents may result in a lack of language separation or a delay in language separation by the child (Burling 1959; Doyle *et al.* 1977; McLaughlin 1978; Fritzsche 1982, 1985; Goodz 1987). Temporary interferences occur when one language is used in circumstances usually reserved for the other language (Taeschner 1983; Pedersen 1987).

The issue of interference and separation is as much a sociolinguistic one as it is a linguistic one. It has been found that bilingual children, who usually speak in a linguistically mixed code, are quite capable of separating their languages when faced with monolingual speakers of either language, but they continue to mix the two languages when talking to bilingual speakers (Bergman 1976; Fantini 1978, 1985).

The direction of interference is usually not random. Dodson (1983:416) suggested that "the preference a baby actually shows for one or more words depends to a large extension the relative number of times he (sic!) hears particular words in either language as well as on the amount of pleasure or the satisfaction of other needs the baby can gain by using them". In other words, a qualitative or quantitative imbalance of the two languages may cause the dominant language to interfere in the production of the weaker language (Mikes and Vlahovic 1966; Mikes 1967; McLaughlin 1978, 1984; Saunders 1982; Kielhöfer and Jonekeit 1983). As the child grows older, it is usually the language spoken in the wider community which becomes dominant and causes

deviations in the weaker language due to the more extensive use of the former and because of its higher prestige in the community (Katchan 1985).

Language mixing and interference must be properly distinguished from code switching. The closest that code switching comes to mixing is probably in the case of borrowing lexical items. Borrowing takes place when the bilingual speaker lacks or does not recall a particular word in the language he/she is using at the moment, when a semantic concept can be expressed more easily in the other language, or when the word from the other language fits better into the structure of the sentence as it has developed up to the particular point at which code switching takes place. The speaker is usually conscious of the switch and can give reasons as to why he/she chose to switch. Moreover, code switching is often marked - verbally or nonverbally - and only takes place in a socially appropriate situation, that is, in interaction with other bilingual speakers.

In most cases, a code switch involves more than just one word. Apart from those switches which are unplanned and triggered through bilingual homophones, proper nouns, borrowed words or compromise forms (Clyne 1967, 1969, 1980), code switching is usually functional for the particular situation or the particular conversational move. Situational code switching is determined by changes of participants, settings, discourse type or topic. Conversational code switching serves to emphasize or clarify a point, and it can be used to attract or retain the attention of the listener, to quote somebody, as well as to exclude or include parts of the audience. All of these functions of code switching have been found in bilingual adults as well as bilingual children (Oksaar 1976; Garcia 1980; McClure 1981; Gumperz 1982; Saunders 1982; Harding and Riley 1986).

Thus, code switching is a very differentiated interactional tool and not a sign of incompetence or confusion. Studies on adults (Poplack 1980) and children (McClure 1981) have shown that

there is a positive correlation between bilingual competence and linguistic complexity of code switched discourse.

The amount of code switching in which the individual engages depends very much on the social norms of the community to which he/she belongs. The effect of extensive code switching on the language development of a young child, and especially on his/her ability to separate the two linguistic systems, has not been sufficiently studied as yet. One can, however expect that the child will acquire code switching as the communicative norm in interaction with bilinguals and non-code switched discourse as the communicative norm with monolingual speakers of either of his/her two languages. Provided monolingual interactants are available for the child, the two linguistic systems will be separated in due course (Lindholm and Padilla 1977, 1978); if not, separation is likely to be delayed until a later point at which non-code switched language behaviour becomes a necessity.

In summary, there is no need to be concerned about language mixing. In part it is a function of normal language learning behaviour, also observed in monolingual children; in part it is due to mixed input. The former will sort itself out with time, the latter needs to be attended to by the bilingual speakers in the environment. If code switching is the norm in a particular bilingual community, then this needs to be regarded as a sociolect particular to and important for this community. Mixed output in the minority language may also be due to a developmental lag between minority and majority language acquisition, with the child getting used to substituting missing items in the minority language with equivalents from the majority language. Once this habit has settled in, it may inhibit the further development in the minority language.

Developmental path: There are very few studies available which have particularly set out to investigate the path which the linguistic development of bilingual children takes as compared with the developmental path taken by monolingual children.

Some of the case studies have reported that their subjects' language developed in much the same way as did monolingual children's language (Leopold 1939-1949; Swain 1972; Fantini 1985; Saunders 1982; de Hower 1987). These comparisons have usually been based on studies of monolingual children done by people other than the author of the bilingual case study and published elsewhere. De Hower (1987:113) criticized this procedure quite rightly for its lack of control of independent variables and methodology used to gather and analyse the data, but acknowledged that such a procedure is unavoidable due to the extent of work involved in collecting, processing and analysing first language acquisition data. Only Taeschner (1983) collected data for comparison herself. Unfortunately, this data is only referred to in very general terms, and we are given no information on which to base a judgement of its methodological stringency. One can only hope that it was adequate.

Leaving the methodological problems and the resulting uncertainty of their theoretical implications aside, these studies all suggest that the path which linguistic development takes in bilingual children is not significantly different from that of monolingual children.

These suggestions are theoretically backed up by the Formal Complexity Theory proposed by Slobin (1973). This theory states that the order in which linguistic devices of any one language are acquired depends on their formal complexity and that their relative order of acquisition cannot be altered.

Padilla (1978) provided some proof of bilingual children's unaltered path of language development. He investigated bilingual children's acquisition of the fourteen morphemes studied by Brown (1973) and de Villiers and de Villiers (1973). This study involved eighteen of the subjects of the previous study, ranging in age from 2;6 to 6;4. However, this time only the 400 English utterances of each child's speech corpus were considered. The results showed that the order of acquisition of these fourteen

morphemes was much the same in the bilingual children as it was in the monolingual children studied by Brown and the two de Villiers. The results showed statistically significant correlations between the youngest bilingual group, aged between 2;6 and 3;9 and both Brown's children and de Villiers' Method I and Method II. The results for Padilla's 4;3 to 4;11 year-old group correlated statistically significantly only with de Villiers Method I, but approached significance in the other correlations. The results obtained for the oldest group aged 5;1 to 6;4 displayed the lowest correlations, and these were not significant. These results suggest that bilingual and monolingual children of similar ages follow the same developmental path. In older bilingual children, i.e. children who are first exposed to only one language and later acquire a second language, the developmental path may be altered.

It has been suggested by a number of researchers in the field, that bilingual children initially only possess one linguistic system made up of linguistic elements from both languages and that language differentiation is a gradual process (Leopold 1954; Imedadze 1967; Oksaar 1973; Swain and Wesche 1975; Swain 1977; Redlinger and Park 1980; Vihman 1985).

Volterra and Taeschner (1978) and Taeschner (1983) proposed a three-stage model of bilingual first language acquisition for the children they observed. During the first stage, the children had only one lexicon consisting of items from both languages, and hardly any equivalents in the two languages. Therefore, they used both languages with everyone, basing their language choice on the pragmatic conditions in which they had first learned to name a particular object or event. The children progressed from single words to vertical constructions and incomplete nuclear sentences in both languages. A few complete nuclear structures also appeared. Morphological and syntactic structures did not appear during the first stage. Most bilingual children discussed in the literature were said to have started to differentiate between the two languages they were exposed to around their second

birthday.

During the second stage, the children realized that their parents spoke two different languages. They started to acquire equivalents in the two languages and oriented their language choice on the language used by the interlocutor. Thus, when the parent switched into the other language, the child followed the switch. However, at some time during the second stage, the children had begun to speak the majority language only. This caused the mother, who was the transmitter of the minority language, to introduce the communicatively effective language switching technique of asking "what?", the result of which was that two months later the children spoke the minority language with her exclusively. Complete nuclear sentences became more frequent, and amplified, complex and bi-nuclear sentences all started to appear simultaneously in both languages. The children acquired the first morphosyntactic markers in both languages in the same way as do monolingual children of the respective languages. The word order was correct, but half way through the second stage examples of intra- and inter-linguistic over-extensions occurred. Both morphological and lexical interferences were observed. These interferences were thought to be due to the children's still lacking ability in differentiating between structural aspects of their two languages. The second stage is believed to take up most of the third year of life the bilingual child's life.

During the third stage, the children adhered rigidly to the 'one parent-one language' principle. They continued to acquire lexical equivalents in both languages. The most important complex bi-nuclear sentence structures were now used with connectives. Both word order and morphosyntactic markers tended to be over-extended incorrectly on the intra-linguistic level as well as from one language to the other. Towards the end of the third stage, interferences and over-extensions decreased considerably. The children were now able to base their language choice on the interlocutor's entire language system. Consequently, their rigidity

34 Psycholinguistic aspects of bilingualism

weakened, and they were able, yet again, to respond in whatever language was addressed to them (cf. Taeschner 1983: 228-229; previously reported in Döpke 1988: 14-15). According to the majority of records, this is accomplished sometime during the fourth year of life.

This position has since come under attack and new empirical evidence has been collected to disprove it. Already in 1975, Padilla and Liebman, who had studied a group of bilingual Spanish/English children aged 1;5 to 2;2, argued that their subjects were using two distinct rule systems. Their argument was based on the finding that their subjects displayed structural consistency at the lexical, syntactic and phonological levels in mixed utterances. Counter evidence to the 'structural consistency' argument was presented by Redlinger and Park (1980) and Arnberg (1981), who found redundant reduplications, e.g. *I put it das up* ('I put it it up'), and redundant lexical information, e.g. *och the pursen* ('and the the purse'), in young bilinguals' mixed sentences. Döpke (forthcoming) argues that such seeming structural inconsistencies may be due to the child's desperate attempts to comply with the sociolinguistic rule of one parent-one language, at an age when the child's lexicon is still lacking equivalents in both languages and when much of the child's output is unanalysed chunks of language.

Meisel (1986, 1987) followed the language development of two bilingual French/German subjects between the age 1;0 and 4;0. The analysis of the data concentrated on word order, case marking and subject-verb agreement. He found that the children applied the different rules for word order in French and German as soon as they produced multiword utterances, and they correctly inflected verbs to agree with subjects according to the rules of each language as soon as they consistently filled the subject slot in their utterances.

De Hower (1987) collected data from one Flemish/English bilingual child between the age of 2;7 and 3;4. She subjected the

data to an intensive structural analysis and came to the conclusion that the separate development hypothesis is the most adequate one. However, this subject was at an age when she could have easily passed through Taeschner's second developmental stage already. This subject's ability to lexically and structurally differentiate between the two languages can therefore not be taken as proof against the hypothesis that children have only one linguistic system during the initial stage of language development.

Bergman (1976, 1981) and Pye (1986) also argued against the initial one-system hypothesis and for the separate development hypothesis. They suggested that inappropriate language choice was due to underdeveloped sociolinguistic rules in the cases of their subjects, but not to an inability to differentiate between the two linguistic systems. Interestingly, Pye (1986) and Vihman (1985) reached opposing conclusions by means of analyzing the same data.

Goodz (1987) supported the separate development hypothesis as well. He suggested that language mixing is due to mixed linguistic input, rather than psycholinguistic factors pertaining to the language learning child.

Arnberg and Arnberg (1985) studied thirteen bilingual English/Swedish children aged 2;10 to 4;0. They compared the children with respect to their language choice in natural interaction and with respect to their linguistic behaviour during word tests. They found that those children who mixed language freely were also prepared to substitute words from one language for the other during the word tests. Since both groups, those who mixed and those who separated the languages, did not differ significantly in vocabulary size, the mixing behaviour could not be explained with lack of vocabulary. In fact, some children who first substituted a word from the other language, later showed that they did know the equivalent. Arnberg and Arnberg concluded that code mixing and code differentiating was a behavioural trait rather than a psycholinguistic necessity. They suggested that language

separation can be motivated by yet to be determined strategies. Early awareness of the two languages as different systems is likely to foster development in both languages.

Earlier studies suggested that the dramatic experience of not being understood often motivates children to separate their languages meticulously (Fantini 1978; Levelt, Sinclair and Jarvella 1978; Arnberg 1979, 1981). This experience of failing to be understood because they chose the 'wrong' language in situations outside the home is a frequent phenomenon for bilingual children. Taeschner (1983) reported an attempt to set up this situation deliberately as a means of increasing the level of minority language development. The technique she used was the "what?" strategy mentioned above. This strategy was very successful in motivating the children to observe the sociolinguistic rules established in the family and hence to progress in both languages. Saunders (1982) introduced a very similar strategy in interaction with his two bilingual German/English sons when they went through periods of reluctance to speak the minority language at the ages of 3;5 to 3;10 and 2;7 to 3;0, respectively. He believes that if he had not done so, the boys would soon have given up speaking German to their father altogether. Dodson (1984) suggested to introduce enjoyable translation games. Such games would help the child to become aware of the extent of separateness between the two languages and support the development of both languages independently of each other. Döpke (in preparation) introduced the categorisation into 'Mummy words' and 'Daddy words' as early as 2;0, at a stage when the child had just started to differentiate objects into Mummy-objects and Daddy-objects, and several months before the child was able to respond to the 'what' strategy appropriately. In many instances, this led to the expression of metalinguistic awareness by the child, e.g. Daddy plane for *Flugzeug* in the German context, expressing his knowledge of the fact that he was speaking English in the German context and at the same time indicating to the mother

that he could not say the more difficult German word.

In summary, bilingual children appear to pass through similar sequences in the development of both their languages as do monolingual children. To what extent the separation of the two languages is due to psycholinguistic or sociolinguistic factors is not quite clear yet. The fact that language separation can be externally motivated, however, points towards the Independent Development Hypothesis, first proposed by Bergman (1976).

Cognitive development

Until about thirty years ago, bilingualism was widely believed to have negative effects on children's cognitive development. This view was supported by research in the field, which overwhelmingly reported correlations between bilingualism and school failure (see Darcy 1953, MacNamara 1966, Peal and Lambert 1962, for reviews of these studies). The seminal work of Peal and Lambert in 1962 drew attention to the fact that sampling methods had been lacking in accuracy and had created biases against bilingual children. Most bilingual children had been drawn from lower socio-economic classes and could, therefore, be expected to do less well in school than middle class children anyway, and many of the children sampled as bilingual were, in fact, monolingual children with ethnic-sounding family names. Moreover, the tests which the children were made to undergo tended to compare only one of the bilingual's languages with the verbal skills of monolinguals and did not consider the children's total linguistic proficiency.

Peal and Lambert (1962), who controlled for degree of bilingualism, social class, sex and age, found that bilingual children scored better on non-verbal *and* verbal intelligence tests, had more positive attitudes to English (i.e. the second language) as well as to school achievement, were better school performers in general, and had more positive attitudes towards English-

Canadians than their monolingual French peers who served as controls. Lambert and Anisfield (néé Peal) (1969) defended the study against criticisms that the cause-effect relationship of bilingualism and intelligence was obscured by only including balanced bilinguals into the study. The re-analysis of the data ensured that it was not the more intelligent children who had become balanced bilinguals, but that it was the bilingualism which had favourable effects on their performance in cognitive tests.

Since then, a large number of tightly controlled studies has been conducted which looked into various cognitive aspects of bilingualism. Bilingual children were compared with monolingual children for metalinguistic awareness and for their facility in divergent thinking tasks. They were also tested for non-verbal intelligence and compared with monolingual children in that respect.

In the following, research reports concerning each of these three aspects of cognitive development will be presented and their results will be discussed. Subsequently, the findings will be viewed in the light of existing developmental frameworks. Finally, the relationship between degree of bilingualism and developmental advantage will be considered.

Metalinguistic awareness: Metalinguistic awareness is tested by means of tasks which require the subjects to differentiate between form and meaning. During ordinary conversations, attention is focussed on meaning. Focussing on the form of the linguistic information instead of the meaning involves the deliberate control of linguistic processes.

The most widely used test of metalinguistic awareness is the "sun/moon" test, developed by Piaget (1929). Children are asked whether it would be possible to call the sun 'moon', and which time of day it would be if that 'moon' was up in the sky. Vygotsky (1962) suggested that bilingual children should be able to agree to this exchange of labels and to predict the ensuing consequences at an

earlier age than monolingual children.

Ianco-Worrall (1972) and Ben-Zeev (1977a,b) found that to be the case. In Ianco-Worrall's study, the bilingual advantage was greater for the four-to-six year-olds than for the seven-to-nine year-olds. In Ben-Zeev's study, the advantage was greater for the middle-class subjects than for the working class subjects. Feldman and Shen (1971) found similar differences between two groups of four- to six year-old children from low socio-economic status (SES) groups - one Mexican-American, one Black American. The bilingual Mexican-American group of children was better able than the monolingual Black American group to switch labels and to use switched common nouns and nonsense names in relational statements. However, Cummins' (1978) variation of the "sun/moon" experiment to "dog/cat" displayed the 'bilingual advantage' only for correctness of reasoning as to why this switch is possible, but not for the follow-up question of: "If this cat is now called 'dog', which sound does it make?". In the latter study, the two groups of children were aged eight-to-nine and eleven-to-twelve, respectively.

Other tests relating to the independence of sound and meaning were first used by Ianco-Worrall (1972) and later by Cummins (1978). They involved explanations of the relationship between label and referent ("Why is the chair called 'chair'?"), contemplation of the possibility for renaming referents ("Could you call the chair 'table' and the table 'chair'?") and realization of the nonphysical nature of words ("Let us call a book 'water'. Can you drink this water? Can you read this water?").

In both studies, bilingual children were more likely than monolingual children to consider the renaming of objects a possibility. However, the explanations of the relationship between label and referent in Ianco-Worrall's study did not show bilingual children to be different from monolingual children, whereas in Cummins' study the justification for why one could or could not exchange the labels for things did show differences between

bilingual and monolingual children. Among the younger children (eight and nine year-olds) bilingual and monolingual children were equally likely to give empirical reasons for their decisions, while among the older children (eleven and twelve year-olds) this was an unlikely way of reasoning for the bilingual children. Of those children who opted for a justification of their decision along the line of the conventional nature of language, about half of the younger monolingual children argued that linguistic conventions are rigid and exchanges of labels therefore not possible. This tendency was weakened for the older monolingual children.

Among the bilingual children, only one child in each age group put the 'rigid convention' argument forward. Overall, 40% of the bilingual eight-to-nine year-old children and 85% of the bilingual eleven-to-twelve year-old children were aware of the arbitrariness of language, which contrasted with 23% of the younger and 39% of the older monolingual children who had reached this stage of awareness.

The differences in results with regard to the type of justification for renaming offered by bilingual and monolingual subjects in the two studies is likely to be due to the fact that Ianco-Worrall's subjects were younger than Cummins' subjects. Even in Cummins' study, the bilingual advantage was much more distinct for the older of his subjects than it was for the younger ones.

Age also played a role in another experiment run by Ianco-Worrall (1972). Here, bilingual and monolingual four-to-six and seven-to-nine year-old were asked which two words out of groups of three were most alike (*e.g.* cap-can-hat). The difference between bilingual and monolingual subjects was most pronounced in the younger age group: the younger bilinguals behaved more like the older bilingual and monolingual children in that they considered the semantic relationship first.

With respect to the nonphysical nature of words in the last question, neither Ianco-Worrall nor Cummins could assure statistically significant differences between bilingual and

monolingual groups.

Cummins (1978) additionally asked his subjects to evaluate empirical and non-empirical statements. He found the bilingual children to be superior to the monolingual children in judging many, but not all, of the items. He explained these difference with bilingual children's "greater flexibility and analytic orientation to linguistic input".

One recent study appears to contradict the positive findings regarding bilingualism. Rosenblum and Pinker (1983) studied four-to-six year-olds, matched not only for sex and age but also for their willingness to consider counterfactual thinking. The authors felt this to be an independent variable previously neglected in studies exploring children's attitudes towards the word-object relationship. Their results did not support the claim that bilinguals had an advantage over in name-manipulation tasks and the authors doubted that there was enough evidence for a differential awareness of the word-object relationship. Katchan(1985), however,drew attention to the fact that Rosenblum and Pinker's bilingual subjects offered more and different types of reasons when asked question such as "why can/cannot you call this X a Y?" As in Cummins' study, monolingual children were more likely to argue along the lines of physical properties, whereas bilingual children tended to refer to the social context of the naming process and the resulting shared knowledge of the speech community. Katchan suggested that, if the dependent variable in the Rosenblum and Pinker study had been the number of correct justifications given by the children, the authors would have had to concede that their results provided further evidence for the superiority of bilinguals.

Tunmer and Myhill (1984) argued that fully fluent bilingualism increases children's metalinguistic awareness which in turn facilitates the acquisition of reading skills. In that way, bilingualism is seen as having lasting effects on children's academic development. Alternatively, readings skills are believed to develop

children's metalinguistic awareness, in which case the bilingual advantage would again be more pronounced for younger subjects and diminishing as both groups of subjects increase in age (Bialystok 1988b).

Bialystok (1988a) suggested that metalinguistic awareness consists of two processing components: analysis of linguistic knowledge, and control of linguistic processes. The former is the ability to construct explicit representations of linguistic knowledge, the latter is the ability to control linguistic processes by intentionally selecting and applying knowledge to arrive at a solution (Bialystok 1988a:155). She argued that bilingualism only affects the control of linguistic processes, and that tests of metalinguistic awareness which do not differentiate between the two types of processing components sufficiently are bound to lead to inconsistent results.

One such test which tapped subjects' control of linguistic processes was carried out by Ben-Zeev (1977a,b). Bilingual and monolingual subjects were asked to participate in a grammatical violation which involved the exchange of "I" for "macaroni" in sentences such as "I am warm". Bilingual children were significantly superior to monolingual children in supplying the correct "macaroni am warm" response. Ben-Zeev took this as evidence for bilingual children's superior grammar control.

In summary, many, but not all, of the tests which were devised to test children's metalinguistic awareness showed bilingual children to be superior to monolingual children in that respect. The relative degree of the 'bilingual advantage' depended on the age of the children as well as on the type of test.

Divergent thinking: Bilinguals have consistently been shown to perform superior to monolinguals on tasks of divergent thinking (Torrance *et al.* 1970; Ianco-Worrall 1972; Scott 1973; Cummins and Gulutsan 1974; Ben-Zeev 1977 a,b). This ability is tested through tasks such as "Think of X and tell me how many things you can do with it." Following Guilford (1967), a child's adeptness

at divergent thinking is taken as an indication of his/her verbal creativity.

Scott (1973) and Landry (1974) claimed that this ability increased with age. In both cases, however, the bilingual subjects were drawn from immersion programs. Thus, it is likely that it was degree of bilingualism rather than age which produced the cognitive advantage of the bilingual subjects.

Kessler and Quinn (1987) compared bilingual and monolingual eleven year-olds who were involved in an inquiry-based science program during which they learned to formulate scientific hypotheses in a problem-solving setting. The children's written hypotheses provided the data base. Bilinguals were found to outperform monolinguals in quality of hypotheses as well as on syntactic and semantic measures. This was taken as an indication of enhanced linguistic and cognitive creativity due to the bilingual language proficiency.

Explanations offered for this phenomenon draw on the cognitive flexibility needed by the bilingual child in order to overcome negative transfer between the languages (Landry 1974; Ben-Zeev 1977 a,b). Torrance *et al.* (1970:74) hypothesized that "the tension resulting from the competition of new and old associations facilitates originality in thinking and plays important roles in scientific and artistic breakthroughs."

The significance of these results has been questioned (Macnamara 1972; Cummins 1974; Swain and Cummins 1979). Matching for SES does not ensure for matched conditions in other areas of developmental background, such as cultural stimulation and social interaction. Moreover, Scott (1973) suggested a possible causal relationship between the ability to perform well in divergent thinking tasks and degree of bilingualism attained. The status of divergent thinking as a dependent variable is therefore questionable.

Non-verbal intelligence: In Lambert and Peal's original study in 1962, the comparison of bilingual and monolingual subjects on

44 Psycholinguistic aspects of bilingualism

measures of non-verbal intelligence was seen as a way of avoiding the cultural and linguistic biases of verbal intelligence tests. They found bilingual subjects to perform superior to monolingual subjects on the Raven's Progressive Matrices test. In Ben-Zeev's studies (1977 a,b), the bilingual subjects exceeded the monolingual subjects on several non-verbal tasks which required perceptual analysis.

These results suggest that the greater verbal flexibility carries over to non-verbal tasks. They are an indication that non-verbal tasks are also mediated through language (Vygotsky 1962; Hakuta and Diaz 1985).

Gorrell (1987) studied the spatial role-taking abilities of bilingual and monolingual kindergarten children. Such tasks call on children's ability to differentiate between their own point of view and that of others. It is widely accepted that the non-egocentric perspective has not fully developed at this age, but due to the earlier onset of the concrete operational stage in bilingual children, Gorrell hypothesized that they should also be able to infer another person's spatial perspective at an earlier age than are monolingual children. The subjects were partly monolingual in Spanish, partly monolingual in English and partly bilingual in Spanish and English. The ages of the children ranged from 5;2 to 6;4. In contrast to an earlier study by Gorrell *et al.* (1982), this study showed no advantage of bilingual children over monolingual children. Gorrell thought that to be a function of the more sensitive and precise tasks as well as the subjects' closer age range in the second study.

Developmental frameworks. The question arises as to how differences between bilingual and monolingual children, displayed in isolated tests, relate to the developmental frameworks of child psychologists.

Hakes (1980) tried to tie in the findings on bilinguals' cognitive advantage due to their greater metalinguistic awareness at an earlier age, with Piaget's developmental framework arguing that

"the general ability whose development underlies the emergence of developmentally advanced metalinguistic performance is the same as that whose development underlies the emergence of concrete operational thought, *i.e.* an increased ability to stand back from a situation mentally and reflect upon it" (Katchan 1985:10). Cummins (1976) suggested that the bilingual advantage would become important again at the for, since language might have a facilitating effect for certain formal operations which are closely related to symbolic functioning (Katchan 1985:11).

Several studies have undertaken to test this possibility. Liedke and Nelson (1968) tested bilingual and unilingual grade one children, matched for age, SES, sex and IQ, on Piagetian concept formation tasks. They found that the bilingual children outperformed the monolingual children. Bain (1975) reported significant differences between bilingual and monolingual six-year olds on a rule discovery test. At age eleven, however, the differences were not significant any more. In contrast, the bilingual children's ability to classify physiognomic expressions on a Portrait Sensitivity Test showed an increasing advantage over their monolingual peers with age. Bain and Yu (1978) replicated this research cross-cultural. The bilingual advantage was generally confirmed for the cross-cultural sample, but cultural differences determined the degree of difference between bilingual and monolingual children.

Gorrell *et al.* (1982) and Gorrell (1987), reported above, investigated bilingual and monolingual children's ability to perform spatial role-taking tasks. The more tightly controlled second study did not replicate the previously found advantage of bilingual children over monolingual children.

These studies suggest that bilingual children enter the concrete operational stage and the formal operational stage at an earlier age than do monolingual children. It is possible, but not tested yet, that the pre-operational stage is also entered into somewhat earlier by bilingual children than by monolingual children.

Controversies in these studies are likely to be the result of insufficient control of the relative stages which experimental and control groups were in. Differences between bilingual and monolingual children found during the transition from one stage to the next are bound to level out as both groups progress further into the next stage and the particular ability tested reaches its ceiling, but differences will reappear in the transition to the next developmental stage.

These findings concerning bilingual children's relative faster development in comparison to monolingual children do, in fact, contradict Piaget's claim that language plays a secondary role for children's cognitive growth. Rather than language being an outcome of the child's need to detach objects from its sensorimotor action scheme, it must be considered a constructive force in the detachment process (Blank 1975; Karmiloff-Smith 1979). This position is also taken by Vygotsky (1962), who argues that the bilingual children have a more flexible speech system which equips them better to use speech for the mediation of the discovery side of the analytical process than does the speech system of monolingual children at the same age. Katchan (1985:15) suggested that "even Leontiev appears to leave room for the possibility that two languages might be able to handle such tasks more easily" than one language when he said:

"Man (sic!) does not think in a way determined by language, he mediates his thoughts through language to the extent to which language answers to the content and to the tasks of his thought." (Leontiev 1981:108)

Bain (1976) and Bain and Yu (1980) investigated bilingual children's cognitive development relative to Luria's (1961) developmental framework. In particular, they studied cognitive consequences of the 'one parent-one language' principle. Although the differences between bilingual and monolingual children did not reach statistical significance at age 1;10 and 2;0, bilingual children typically performed ahead of their monolingual age-

mates on language related tests of cognitive maturity at age 3;10 and 4;0. As in the earlier studies, these differences were found to varying degrees in the cultural combinations investigated, indicating that cultural background also had a bearing on the rate of cognitive development. Bain and Yu (1980:312) suggested that it is the very principle of 'one parent-one language' which facilitates the mastery of the four interrelated functions of language proposed by Luria (1961), *i.e.* separation of sound and meaning, differentiation between meaning of the communication and the communicator, abstracting the general category from the particular experience, and self-control of one's cognitive dynamics.

Degree of bilingualism: Many of the studies which reported positive developmental effects of bilingualism tacitly or openly assumed high levels of bilingualism. This section will discuss the role which degree of bilingualism plays for the outcome of such studies.

In order to account for the inconsistencies in the literature, Cummins (1979a) proposed the existence of two thresholds: the lower threshold level represents the minimal linguistic skills in either one of the two language which children must attain in order to prevent damaging effects on cognition being caused by bilingualism; the upper threshold level represents well-developed linguistic skills in both languages which allow cognitive acceleration. In between these two thresholds, effects from bilingualism are neither negative nor positive.

This hypothesis is congruent with findings by Barik and Swain (1976), later replicated by Harley and Lapkin (1984), as well with Cummins' (1977) further analysis of Cummins and Gulutsan (1974). Barik and Swain (1976) found an increase in IQ scores of high French achievers over a three-year period. During the same period, low French achievers' IQ scores remained unchanged. The subjects were drawn from two French immersion programs in Canada. Cummins (1977) suggested that only those bilinguals who had attained a relatively high level of second

language competence performed at a higher level on the verbal originality task (administered in L1) while children who remained dominant in their home language were in a disadvantage in relation to monolingual children on verbal fluency and flexibility skills (Cummins and Swain 1986:16).

Hakuta and Diaz (1985) and Hakuta (1987) conducted a tightly controlled study of children with varying degrees of bilinguality. The children's level of bilingualism at Time 1 reliably predicted their performance on a non-verbal intelligence test (Raven's Progressive Matrices) at Time 2, but not the reverse. Thus, the relationship between level of bilingualism and level of cognitive achievement was shown to be unidirectional.

Bialystok (1988b) tested the relationship between degree of bilingualism and performance on tasks of metalinguistic awareness on groups of French/English and Italian/English children aged 6;6 to 7;0 and their monolingual age-mates. The results showed that degree of bilingualism correlated positively with performance on metalinguistic tasks. Both partially bilingual subjects and fully bilingual subjects exceeded monolingual subjects on test which involved the control of linguistic processes (sun/moon, dog/cat); but only fully bilingual subjects were significantly superior to monolingual subjects on one of the tests which involved the analysis of linguistic knowledge (judging and defining words) and superior to monolingual and partially bilingual subjects with respect to the other (syntax correction). She concludes that "the inconsistencies previously reported in the literature for assessment of the metalinguistic skills of bilingual children [must be attributed to two methodological problems: the use of metalinguistic tasks in which these skill components are confounded and the comparison of bilingual children who differ in their bilingual experience]" (Bialystok 1988b:566).

In summary, we would like to assert that bilingualism *per se* does certainly not have any negative effects on cognition. In fact, the opposite appears to be the case: high levels of bilingualism

have accelerating effects on children's cognitive development, verbally and non-verbally. The important question then is: which are the factors in a child's environment which assure high levels of bilingualism?

Emotional development

Research has not usually concerned itself with the emotional consequences of parents' decision to speak or not to speak their own language with their children after they have arrived in a new country. However, earlier anecdotal reports suggesting negative influences of bilingualism on personality development (Müller 1934; Weinreich 1953; Diebold 1968) have since been rejected as confusing bilingualism with co-occurring social variables (Porsché 1978; Dodson 1983; Appel and Muysken 1987).

A number of studies have shown that a shift away from the home language does not solve social or emotional problems. Instead, the opposite appears to be the case. In a comparison of Turkish and Moroccan children in transitional and monolingual programs in the Netherlands, the children in the transitional programs were found to have fewer problems (Appel, Everts and Teunissen 1986). In another study, no differences were found between two groups of Spanish/English bilingual children on three of four measures of psycho-social adjustment. The fourth measure (repetition of a school year) favoured those children whose families had stopped speaking Spanish in the home.

In an informal talk a few years ago, a Namibian school psychologist working in a bilingual German/Afrikaans high school reported that 'unreal' monolingual children, *i.e.* children whose parents were from a mixed German/Afrikaans background but had decided to speak only Afrikaans with their children, had behavioural problems relatively more often than children from families where both languages were continued or where both parents were German and German was the only language spoken

in the home. He put this down to the connotative meaning potential, and hence the emotional aspect of the relationship, being impoverished in a situation where a parent speaks a language to the child which he/she is not utterly at home with.

For any child, it is important to establish emotional and intellectual closeness with his/her parents. Most parents are best able to communicate their feelings in their own language. They are also best equipped to transmit their way of thinking, which is closely related to their cultural heritage, in their own language. Unless these parental needs are met, children are not able to experience their parents as whole persons.

In many cases, children are only able to experience their parents as competent speakers of a language when they communicate with them in their parents' first language. Elwert (1959:239) addressed this point when he wrote that "it was positively embarrassing for us to hear [our mother] speaking 'incorrectly', to see her in a position of inferiority" (translated from German by Saunders 1988:105). This feeling was enthusiastically endorsed by some of the bilingual students in the Applied Linguistics Program at Melbourne University.

Saunders (1982), who raises his children according to the principle of 'one person-one language' in Australia, reported that his children objected heavily when asked whether German should be given up. The author suggested that the language used in parent-child dyads creates a bond which can not easily be broken without affecting the emotional relationship.

Emotional relationship and quality of interaction are interdependent in parent-child dyads (Döpke 1986; Döpke 1988). Moreover, high quality of interaction and a good emotional relationship support rate of language acquisition as well as cognitive/emotional development (van IJzendoorn *et al.* 1987; Bus and van IJzendoorn 1988; Döpke 1988). By the same token, rate of language acquisition and cognitive/emotional development may be impaired if the parents are less than competent speakers

of the language used for interaction between them and their children.

In summary, resettling in a new country is least disruptive to family cohesion and children's cognitive/emotional development if the parents' first language is maintained in the home.

Educational development

In spite of the evidence accumulated by scholars in the fields of linguistics and psychology, showing that bilingualism *per se* does not have any negative effects on children's linguistic and cognitive development, disproportionately large numbers of bilingual children are unsuccessful in school. Lambert (1977) suggested that certain social factors influence the levels of proficiency which bilingual speakers attain. In what follows, these factors will be described and discussed.

Prior to the 1960s, which introduced tight variable controls for studies of developmental effects of bilingualism, research reports predominantly attested that children of immigrant families who were native speakers of languages other than the majority language of the host country, and hence the language of education, were badly disadvantaged in school. Little was known about the extent of these children's bilingualism and general language aptitude, but nevertheless bilingualism was claimed to be the cause for it.

Hansegård (1968) coined the term 'halvspråkighet', later translated into 'semilingualism', for bilingual Finnish-Swedish children's less than complete language proficiency in both languages. This term and the ensuing concept has since been used in Sweden (Skutnabb-Kangas 1975, 1978; Skutnabb-Kangas and Toukomaa 1976; Toukomaa and Skutnabb-Kangas 1977; Lasonen and Toukomaa 1978), and has also gained currency outside Sweden (Cummins 1979a). Alternatively, this phenomenon has been termed 'subtractive bilingualism' (Lambert

1975; Swain 1979) and 'less than native-like competence' (Cummins 1976, 1979a) by researchers in Canada.

'Semilingualism', or 'subtractive bilingualism', is associated with a situation in which a child acquires a first language in the home and develops all the necessary linguistic competence deal with his/her pre-school home life in the first language. Subsequently, the child is placed into a second language environment in school. The school environment does not only force the child to acquire a new language, but also expects the child to acquire a different set of linguistic skills. Due to the limited proficiency in the second language, the second language learner is not yet able to cope with the new linguistic demands. Consequently, an intellectual gap between monolingual and bilingual children develops which manifests itself in the child's inability to manipulate language for intellectual purposes. At the same time, the development of the home language stagnates, due to a lack of new and intellectually stimulating demands in the home language environment. Thus, bilingual eight to ten year old children may find themselves in a situation where they are unable to speak their home language with the same degree of sophistication as monolingual children of their own age as well. Skills in their second language may also lag behind their monolingual peers in the host country, due to the initial interruption to their intellectual development.

Cummins (1979a) clearly endorsed the notion of 'semilingualism', but was concerned about the value-laden implications of the term. Instead he found it important to differentiate between basic interpersonal communication skills (BICS) and cognitive/academic language proficiency (CALP) (Cummins 1979b, Cummins and Swain 1983). BICS are faster to acquire than is CALP. BICS make use of language which is cognitively undemanding and context-embedded (Cummins 1983). The meaning of the linguistic message is interactively negotiated and supported by a wide range of paralinguistic and situational

cues. CALP, on the other hand, is cognitively demanding and context-reduced. It "relies primarily on linguistic cues to meaning and may in some cases involve suspending knowledge of the 'real' world in order to interpret (or manipulate) the logic of the communication appropriately" (Cummins and Swain 1986:152f). Such skills are the primary factors in the development of literacy. They are specified as (1) vocabulary-concept knowledge; (2) metalinguistic awareness; and (3) the ability to process decontextualized discourse, spoken or written (Cummins 1979a, Cummins and Swain 1983; Martin-Jones and Romaine 1985). While basic interpersonal communication skills are language dependent, cognitive/academic language proficiency is not (Keats and Keats 174; Keats, Keats and Liu Fan 1982).

Children in linguistic submersion situations often appear to acquire satisfactory-to-good basic interpersonal communication skills which lure teachers and psychologists into believing that they have no more language problems, when in fact they have not yet acquired age-appropriate cognitive/academic language proficiency. Cummins claims that it is this lack of insight into the more complex aspects of language development which creates language minority students' academic deficits.

'Semilingualism' as well as the BICS/CALP distinction have come under vehement attack. Edelsky *et al.* (1983) criticized the notion of 'semilingualism' for its implied idealization of 'full' competence. The criteria by which semilingualism is measured and diagnosed amount to "a confused grab-bag of prescriptive and descriptive components" (Edelsky *et al.* 1983:2). Moreover, the term has been used inconsistently for either only bilingual children or bilingual children as well as monolingual children. The BICS/CALP distinction was called 'a spurious language deficiency dichotomy' by Edelsky *et al.* (1983:4).

Martin-Jones and Romaine (1985) endorsed this criticism arguing that, far from being linguistically interdependent, CALP skills are highly culture-specific. They relate to a specific set of

cognitive abilities required and fostered by our school system. In their view, "cognitive academic language proficiency (CALP) can only be understood as appropriate display of schooled language" (Martin-Jones and Romaine 1985:30). They further pointed out that our schools only promote and reward certain types of literacy skills, thereby discriminating against children who have acquired a different set of cognitively demanding and decontextualized skills. Heath (1982) illustrates this point: the black community she studied had a rich oral tradition, and their children entered school with the ability to tell and make up stories in a much more advanced manner than their white middle class age mates. This ability was, however, not asked for and not fostered in school for several years. By the time these skills were expected of them, the black children had been completely disenchanted with school.

Notions like CALP and semilingualism are seen as proposing a new type of deficit theory. Their proponents are criticized for their apparent failure to acknowledge the primary role of social and economic factors for bilingual children's school failure, instead assuming an intervening language factor to be responsible for the outcome of educational programs for minority children (Brent Palmer 1979; Edelsky *et al.* 1983; Martin-Jones and Romaine 1985).

We agree with the above position which stresses the close relationship between socio-economic factors and school achievement. However, we do not agree with the criticism of Cummins' position.

The experience of school failure is not restricted to immigrant children from non-English-speaking countries. High proportions of monolingual children from lower socio-economic classes are unequipped to comply with the academic demands of our school system as well. The crucial question to ask is: what is it about low SES (socio-economic status) membership that causes low academic achievement?

Turning to the characteristics of the educational system for an answer to this question, we find that the use of language is central

to our evaluation of intellectual and academic achievement. Literacy and other decontextualized uses of language are particularly highly valued in all areas of social life associated with power. Although this might be ethnocentric and chauvinistic and other intellectual abilities might be on a similar level of cognitive sophistication, the primacy of literacy is a reality of the power distribution in our society. Wells (1985a, 1985b, 1986) and his colleagues from the Bristol Language Development Study followed a large group of children through their pre-school and primary school years. Their aim was to pin-point the differences in language acquisition environment experienced by children from various social classes. At the end of the first five years of the study, when the children were just about ready to enter primary school, no such difference was found yet. All children were able to communicate sufficiently in their particular environments. None of the children were a-lingual or non-verbal. Although the individual differences were vast, all children had had a range of rich language experiences.

The project was then extended by another five years. Soon after school entry considerable differences emerged with regard to how well the children coped with the intellectual requirements of the new environment. In most, though not all cases, school success correlated with the socio-economic status of the children's families. On re-inspection of the pre-school data, Wells found that school success correlated significantly with the number of stories the children had listened to during their pre-school years. Other literacy-related activities like drawing and colouring, looking at picture books and talking about them, and writing or pretending to write, all also tended towards correlation with school success, but did not reach statistical significance.

Wells (1986:156) explained these results as follows:

What is important about listening to stories, then, is that, through this experience, the child is beginning to discover the symbolic potential of language: its power to create possible or

imaginary worlds through words - by representing experience in symbols that are independent of the objects, events and relationships symbolized and that can be interpreted in contexts other than those in which the experience originally occurred, if indeed it ever occurred at all.

The suspicious co-occurrence of immigrant children's SES and school success or failure and the absence of an unconditional relationship between bilingualism and school achievement point towards other factors as instrumental in this process. In the light of Wells's findings, Cummins' distinction between BICS and CALP becomes considerably more valid. The development of CALP is contingent on the introduction to decontextualized language (Heath 1982; Cummins 1983; Snow 1983; Wells 1985b, 1986). It is the knowledge of what language can be used *for* which is independent of the knowledge of a particular language.

Bilingualism and social identity

So far in this paper we have considered the psychological aspects of bilingualism from the point of view of the individual, especially the child. But another branch of psychology, social psychology, has much to contribute to our understanding of bilinguals and bilingualism. Social psychology is the branch of psychology which explores among other topics such things as attitudes and those aspects of our identity which derive from our sense of belonging or not belonging to groups.

The future potential for bilingualism in Australia is a function of people's attitudes to languages and varieties of language. In this section of the paper some recent Australian research on language attitudes is discussed, paying particular attention to the intergroup context in which these attitudes are formed, maintained or changed. A social psychological model, Social Identity Theory (Tajfel 1982), will be used as the framework for the discussion. In order to plan for the promotion, development

and conservation of bilingual resources in Australia, we need to be aware of the (usually unconscious) social forces assisting or militating against our efforts. In other words, it is not enough to see the choice of bilingualism or not as an individual choice, but as a choice which is heavily constrained by our identity as members (or non-members) of salient groups in the social contexts in which we live.

Social identity theory: This theory was originally developed by Henri Tajfel at the University of Bristol and subsequently extended and modified by, among others, John Turner, now at Macquarie University, and Mike Hogg, now at the University of Melbourne. None of these writers have concerned themselves particularly with language, although Tajfel and Hogg have written briefly about it, but other social psychologists have applied the theory to language issues. The best known of these are perhaps Howard Giles, another of Tajfel's colleagues at B successor in the Chair of Social Psychology there, and Canadians such as Richard Bourhis and Donald Taylor.

Social Identity Theory proposes a four-stage sequence, which can be sketched graphically as follows (Husband 1982):

Social categorization

Search for positive psychological social identity

The formation of distinctiveness

Social comparison

What do these rather abstract and forbidding terms mean?

a) Social categorization: It has been shown that in our perception of the physical world we use categories to classify and organize our perceptions of stimuli that can be shown to be objectively rather different. For example, it was shown experimentally by Tajfel and Wilkes (1963) that the categorization of physical phenomena leads to accentuation effects (differences between things categorized as "unlike" are exaggerated, as are similarities between things categorized as "like"). This cognitive phenomenon is functional; it allows us to lump together things

that are in fact rather different in order to make sense of input from the environment. We tend to see things as like or unlike other things; reducing the processing task (we don't have to pay attention to every detail) helps us to cope with the myriad diversity of physical phenomena.

In the social world, too, we use categories to reduce the complexity of our experience to manageable proportions. In Tajfel's words, we use "cognitive categories" to "segment, classify and order the social environment"; these categories "enable the individual to undertake many forms of social action" (Tajfel and Turner 1979:40).

We allocate individuals to one category or another on the basis of cues. In the case of ethnic categories, these cues may be ones to do with physical appearance, or language usage, for example.

Some categories have associated with them *other characteristics* which are assumed to follow from membership of the category; in other words, *categories* may have associated *stereotypes*.

The categories that we use are socially derived and are learned from the social environment. And, just as social settings vary, so do the categories we use to perceive the social world. For example, in our society, weight is a cue to a potential rather than a very real category. Do we really, like Shakespeare's Julius Caesar, consider "lean" people to be dangerous? Or fat people to be "warm and friendly"? In a different interethnic context, however, the issue may be rather different. Samoans, for example, who tend to be rather heavy by European standards, are often branded by Europeans in Samoa as "lazy" or "slow" on the basis of their weight (Joseph Lo Bianco, personal communication).

It is sobering to realize how "naturalized" these categories may become, and how arbitrary the cues to membership of them are. An Englishwoman who spent the first twelve years of her life in rural Nigeria said that one of the things she had to learn when her family returned to England was that it mattered whether a

person was black or white. This had never occurred to her as being of significance in the context in which she had grown up. It would be as if chin-shape were the basis of powerful social categorizations and we were not tuned in to this as the basis for our understanding of the social world, so that people were perceived as naive or unaware.

It is interesting to see the growth of an awareness of the relevant categories in the development of social identity in the child. In a study of Hebrew-speaking families from Israel living in Melbourne to be discussed below (McNamara 1988b), one informant, a mother of two young children

born in Israel but growing up in Australia, discussed the process in her children. The children had moved from a world in which Jewish cultural identity and Jewish cultural symbols were the norm and taken for granted, to one in which Christian symbolism pervaded social life and Jewishness was a separate, minority identity:

It took her quite a long time to understand the fact that we're Jewish and it comes up usually during Christmas. Well she sees all the ads on television and it looks beautiful and she says "Can we have a Christmas tree?" so I said "Look we can't have a Christmas tree because we're Jewish and Jews don't have Christmas trees" but sometimes Hanukkah [Jewish Festival of Lights, usually falling in December] comes but I said to her "I don't have to justify because the Christians have Christmas we have Hanukkah, this is how it goes and this is how it is". So now every time we go she says "Is it true that we're Jewish, *nachon she anachnu Yehudim*?" and things like this. I said "Yes, we're Jewish"... I remember going with my son through the same stages because we came here he was three and a half and by the time he was four and a half we went through a Christmas and... we went actually a year later we went on a trip and we got to Canberra and went into a motel and one of the maids there asked the kids "Did you have nice presents for Christmas?" (it

was Christmas time) and my son said to her "We don't celebrate Christmas" (he was four and a half) "we're Jewish but we had presents for Hanukkah"...

Language may be an important cue for inter-ethnic categorization (cf Giles's (1979) work on identity markers in speech). In Australia, Callan, Gallois and Forbes (1983) have studied evaluative reactions to accented Australian speech and have explored the stereotypes associated with particular accents. This and other Australian studies will be discussed further below. Learning to associate particular linguistic cues with ethnic categories may involve considerable learning, pointing to the social nature of the process. For example, Cairns (1982) has shown how children in Northern Ireland may take several years to learn to recognize names as cues to religious categorization.

Often this process of self- and other-categorization involves linguistic cues that may at first be rather confusing to the child, as this nice example from the study of Israeli families (McNamara 1987) mentioned above shows:

My children when they came here they didn't know that they were Jewish... my boy asked me "I..I'm Jewish?" or in the synagogue when they were taken my little boy asked the Rabbi at the end... he put up his hand "Are you Jewish?"... the Rabbi!... and then I asked "Why did you ask the Rabbi that question?" He said "He couldn't speak Hebrew so I wasn't sure if he was Jewish or not... he spoke in English so how can I know?" He didn't quite connect the Rabbi with Judaism with everything... so they hadn't realized, being always in a Jewish community, taking for granted, you never think of it unless you see someone else that is not, so you know what you are... like looking in a mirror...

b) Social identity: It is not just that we learn to categorize our social experience in this way. We recognize ourselves as belonging or not belonging to valued categories which are salient in our particular social environment. This valuation of membership

categories may be internal (i.e. by members of the ingroup) or external (by outgroup members). The terms or "dimensions" in which this valuation is expressed are important, and will be discussed shortly. We thus become conscious of our *social identity*, and the degree to which it is positively or negatively valued.

c) Social comparison: Tajfel argues that we are constantly engaged in a competitive process of comparison of our own membership groups with other groups. The individual is involved in a search for ways in which s/he as a group member may feel positive about his or her sense of difference from members of other groups. In Tajfel's terms, the group members are looking for dimensions of comparison on which they can feel a sense of their own *positively valued psychological distinctiveness*.

The existing framework of social relations between groups will provide some dimensions on which comparisons can be made: power, wealth, status and so on. Other dimensions of comparison may be attributes such as intelligence, historical continuity, adherence to traditional family values, warmth, creativity, religious values and many others.

Language may itself be a dimension of comparison between groups; we may call this its status. The status of a language in the eyes of the ingroup, the internal status of the language, is discussed in Smolicz's work on "core values" (1979, 1984). This notion, it is worth pointing out, is somewhat problematic (cf. the discussion in Clyne 1988b, and in papers in Clyne 1985).

It is important here to distinguish between the *symbolic* and *communicative* functions of language (Clyne 1988b). While language may have value as symbolizing a group's identity, this does not necessarily mean that it will be valued as a communicative medium; this is true of modern Hebrew in the non-Israeli Jewish community in Australia (McNamara 1988b; Klarberg 1985). This distinction may also account for the fact that while there is no disputing Australian Poles' attachment to Polish, there has been considerable shift away from Polish relative to the shift from

other ethnic languages in Australia (Clyne 1988b).

In terms of external status, it is still the case, despite optimistic claims to the contrary (e.g. in Smolicz 1984), that immigrant languages in Australia have low external status, as measured by a recent study in Adelaide of tolerance for their use in public (details in Mackiewicz and Kee 1986; cf. also the discussion in McNamara 1988a). As far as English is concerned, its high status for both migrant and non-migrant groups in Australia is confirmed in several studies (see below).

It may be that on the basis of social comparison, a person or group may perceive their social identity negatively; that is, they may recognize that they belong to a group or group's membership which they do not value. The following strategies are available: *individual mobility*, whereby individuals may decide to "pass" into a more valued group (this is the assimilation option, very common in Australia; the shedding of a particular identity by an individual may involve the shedding of the linguistic identification markers of that identity, language being, as we have seen above, a cue to social categorization); *social creativity*, where the terms of the intergroup comparison are stood on their head (the "black is beautiful" phenomenon); *outright social competition*, where there is an overt struggle to assert one's identity against that of a threatening outgroup (cf. Quebec, Belgium, for examples of situations involving language). More details of these strategies are available in Tajfel (1981).

The salience of ethnic identities: Obviously, one's specific ethnic identity is not going to be uniformly relevant in all social situations. And one's social identity is not only or perhaps mainly a question of one's ethnolinguistic identity. We are members of many more social groups than ethnolinguistic ones - gender, class, education level, age, etc. A number of factors may influence the salience of a particular ethnic group membership. Two of these are (Giles and Johnson 1981):

1. Situation: Tajfel (1981) refers to a continuum of social

behaviour, from inter-individual (a love affair, a chat over the back fence, where the ethnic identity of the individuals involved may not be salient) to intergroup (e.g. a race riot, where the social identity of those involved is the only thing that matters, and the individual characteristics of the outgroup members are irrelevant). By no means all of our contacts with people from different ethnic groups may thus be interpreted in intergroup terms.

2. Multiple group membership: Class, age, gender and occupation membership groups may be equally powerful or more powerful elements in defining an intergroup situation for an individual (cf. the discussion of Callan and Gallois 1982, and Callan, Gallois and Forbes 1983, below).

The more membership groups a person belongs to, and the less overlapping they are, the less likely that person is to perceive a situation in terms of a particular ethnic membership. In addition, the more of these membership groups are shared with another individual from a different ethnic group, the less relevant ethnic group membership is likely to be in an interaction with that individual.

In addition, different membership groups may provide differential status. A person may be likely to de-emphasize his/her membership of groups which offer low status (for example, a low-status ethnic group when interacting with a member of a higher status ethnic group) in favour of membership of groups (education, occupation) which offer greater status.

Individuals may also be members of more than one ethnically defined group: "Anglo-Saxon" and "Australian"; "Asian" and "Vietnamese"; "Israeli" and "Jewish" (McNamara 1988b); "Russian" and "Jewish" (Kouzmin 1988: see below). Often, there is a hierarchical relationship between the overlapping ethnically-related categorizations, so we may speak of group and subgroup. This issue is relevant to the work on the various migrant communities to be discussed later in this section. The categories "migrant" and "Italian", "Russian" etc. are also examples

of this superordinate/ subordinate multiplicity. Differing intergroup comparisons may make one or other of these potential social identities salient in a particular situation.

3. The transformation of social context: This factor, which is particularly relevant to the situation of immigrant languages, has been less widely discussed. As social categorizations determine social identity, social identity must be seen as context dependent. That is, particular social settings will differ from one another in the social groups that are present and salient, and in the relationships between those groups. Each intergroup context creates its own set of salient categories for intergroup comparison and the establishment of social identity. Social identity is thus dynamic, interactive and context-dependent.

This is particularly relevant to situations where the social context is radically transformed, for example in migration. In the act of immigration, immigrants are entering a new social context, in which their former social identity will have to be redefined; it may even be ultimately abandoned. And, as social identity changes, this is likely to have linguistic implications. As the group or the individual redefine their identity in a new intergroup context, their language attitudes and language behaviour may be expected to change as a result.

Examples of Social Identity Theory applied to the applied or bilingual and multilingual context

1. Israeli Jews in Melbourne: McNamara (1988b) used Social Identity Theory to explain the rapid shift in the direction of English monolingualism among the Australian-born children of Israeli native speakers of Hebrew living in Melbourne. This small group (approximately 1,000 families) illustrates the explanatory and predictive potential of aspects of the theory rather clearly.

The new social context in which the Israeli immigrants find themselves involves a dramatic shift in the available social categories. In interaction with the two most salient outgroups for

these families, Australian Jews and Gentiles, the following intergroup categorizations were salient:

a) Jewish vs Gentile (in interaction with Gentiles): In this interaction, a specifically Israeli identity is less significant. Gentiles are on the whole not very successful in making a distinction between "Jewish" and "Israeli", partly because the linguistic and other cues to categorization in specific "Israeli" terms are unavailable to most Gentiles.

b) Israeli vs Jewish Australian (in interaction with Australian Jews): In contrast to Gentiles, Australian Jews are able to recognize cues to categorization as "Israeli", a salient category in the Jewish community.

c) Israeli living permanently abroad ("Yordim") vs Israelis in Israel, or temporarily resident in Australia (in interaction with Australian Jews, or with other Israelis): Israelis living permanently abroad tend to be stigmatized by Israelis still in Israel, as having abandoned their country and their fellow citizens in time of crisis; this stigma tends to be internalized by the "yordim" themselves (see McNamara 1988b for further explanation of this pejorative term in Hebrew and its social and historical context). This syndrome of guilt at leaving the home country and moral criticism by those at home is a familiar phenomenon in several other cultures (cf British citizens leaving wartime Britain; Vietnamese, El Salvadoreans, and Chileans in Australia may display aspects of the same conflict).

d) Migrant vs native-born Anglo-Australian (in interaction with native-born Anglo-Australians).

Note that none of these categories are salient in Israel, where important categories include Israeli vs non-Israeli; religious (the minority) vs non-religious (the majority) - a distinction expressed (confusingly for Gentiles) by Israelis as "Jewish" vs "Israeli"; western Jewish ("Ashkenazi") vs eastern Jewish ("Sephardi"). Similarly, these categories may no longer be salient in Australia.

In interaction with both outgroups, the *multiple group*

membership of the Israelis - in particular their dual ethnic identities as Israelis and Jews - is a key to understanding the process of identity redefinition and its linguistic consequences in the new social context. The study confirmed that *in interaction with Gentiles*, Israelis felt they were perceived in terms of their general migrant origin, or, if specifically, in terms of their Jewishness. It is not really surprising that "Israeliness" is not a particularly salient category for Gentiles. The cues to such a categorization (recognition of a Hebrew accent, or of specifically Hebrew names) are not generally available to most Gentiles, whereas cues to categorization in terms of Jewish identity are well-known, and reinforced by conditioning which draws on a centuries-old tradition of Christian antagonism to Jews.

This fact of outgroup perception is a new experience for Israelis, who have had themselves no direct experience of Jewish minority existence in a Christian society. In fact, non-religious Israelis (the majority) are not necessarily used to seeing themselves as "Jewish" at all, a term *they use* to refer to Orthodox or Ultra-Orthodox Jews in Israel. One informant articulated this:

The minute an Israeli leaves Israel, I believe he is a Jew... as far as the non-Jewish community is concerned. In Israel he can think as an Israeli but in the Diaspora he becomes a Jew whether he likes it or not.

The Israelis' direct or indirect experience of (infrequent but unmistakable) anti-Semitic incidents or remarks indicate clearly to them that categorization as "Jewish" is negatively evaluated by the outgroup. However it is not only, or perhaps even most importantly, such incidents or remarks which make Israelis aware of the salient categories in the new social context. The pervasiveness of Christian symbolism in mainstream Australian culture acts as a constant reminder to the Israelis of their Jewish "otherness".

The experience of the Israelis in the new social context, then, leads them to redefine themselves as members of three categories

stigmatized by more powerful outgroups: (a) migrants, non-native speakers of English; (b) Jews like other Diaspora Jews, a self categorization many would have rejected in Israel; (c) "yordim" (see above). Interactions with Australian Jews, too complex to discuss here, also lead them to redefine their identity in relation to that group, to stress their "Jewishness" and not their "Israeliness", which in the Australian context is associated with the stigmatized identity of the "yordim".

In order to deal with this sense of "negatively valued psychological distinctiveness", Israelis have the choice of retreat into their own Israeli, Hebrew-speaking group (social creativity), assimilation into the Australian Jewish group (a non-Hebrew speaking group which is increasingly monolingual English) or assimilation into the Gentile mainstream (again monolingual English). Barriers to the latter by Gentiles (what Giles and Johnson (1981) call "boundary hardness") mean that the second of these choices is the most likely, particularly for the children of the immigrants themselves.

The linguistic consequences of the new situation the Israelis find themselves in then are complex, but are likely to point in one direction: language shift to English. In terms of Hebrew as a migrant language in general, it has already been pointed out above that migrant languages have low status in Australia. Majority group attitudes on this point are rapidly internalized by migrants themselves, as shown in the study by Mackiewicz and Kee (1986) mentioned above, and in the study by Callan and Gallois (1982) to be discussed below. To the extent that outgroup attitudes lead Israelis to redefine themselves as Jews in the Australian context, this may result in a commitment to the *symbolic* function of Hebrew (as an expression of support for Israel, and of traditional Jewish identity for ceremonial purposes) but not necessarily a commitment to the *communicative* functions of Hebrew (for the distinction, discussed above, cf Clyne 1988b). Being Jewish in Australia does not involve being able to

communicate in Hebrew. In common with other languages of immigrant groups in Australia, Hebrew has a lower status than English as a *vernacular* language in the Jewish community, despite its high symbolic status.

It is possible to see mainstream Jewish language attitudes as an internalization in turn of majority group (i.e. Gentile) attitudes. Similar phenomena in other communities, that is, the role of the local recipient ethnic community in the linguistic socialization of newcomers to the norms of the new society, have been little explored in relation to other immigrant groups and their languages. The local ethnic group may thus be seen as the agent of the majority group. The above analysis would suggest that a massive language shift (i.e. towards English monolingualism) is likely in the children of these Israeli families, and this is borne out by the evidence (see McNamara 1987, for details).

What we see here in microcosm is being repeated throughout tens of thousands of other immigrant families: the shedding of linguistic markers of stigmatized identities in favour of the mainstream monolingual norm. The relevant social categorizations will differ from group to group, but the process is essentially the same, eating away at the potential for individual bilingualism and multilingualism in our community.

The studies that follow did not use Social Identity Theory as the framework for the research, but their findings can be usefully reinterpreted in terms of it.

2. Italian and Greek bilinguals: Two studies by social psychologists at the University of Queensland provide examples of multiple group membership effects not discussed so far. Callan and Gallois (1982) found that the sex of their bilingual Italian and Greek Australian subjects made a difference in the evaluation of matched guises. (Matched guise studies involve bilingual informants making value judgements, including attributions of personality traits, evaluations of social status, etc, in relation to individuals they hear speaking on tape in one of two or more

languages; the subjects are unaware that fluent bilinguals are taking roles in either language alternately, *i.e.* adopting language "guises"). Female subjects were found to be more favourable than their male counterparts to English guises, and less favourable towards Italian and Greek guises. In a further study (Callan, Gallois and Forbes 1983), Greek-Australian females rated Greek-accented English more negatively than their male counterparts. The authors comment:

Our results highlight the importance of sex role in any theory of ethnolinguistic vitality. Women in upwardly mobile minority groups, so far, appear to threaten the maintenance of their minority language by downgrading it, and to lead their children into adopting the majority speech style. It is possible, however, that this tendency is greater in communities where the status of women is lower in the minority group than in the majority group. (Callan, Gallois and Forbes 1983:423)

This finding can be explained in terms of multiple group membership. In this case, ethnic identity is associated with a more restrictive female role. The opportunities for the female as a female are greater in the outgroup, and this affects her evaluation of her own ethnic group and the ethnic outgroup.

The earlier of these studies has been criticized on linguistic grounds (Pauwels 1986a). Subjects were asked to evaluate Standard Italian guises, and as this variety is not represented in the Australian speech community, the findings must be inconclusive.

3. The Dutch community: Pauwels (1986b, 1988) reports on the maintenance of the Limburgs dialect of Dutch and standard Dutch among Limburgers from South Holland in Australia. She notes the use of English by Limburgs speakers when addressing speakers of standard Dutch in Australia even though the dialect speakers would normally use standard Dutch in such interactions in Holland, and are capable of using the standard in Australia if they wanted to. Brabant speakers (who come from a neighbouring

area) do not display such behaviour, nor do Swabians from Germany in interaction in Australia with other Germans. These examples can be accounted for in social identity terms, and illustrate the concepts of multiple group membership and the strategy of social creativity. The Limburgers in Australia are both Limburgers and Australian. In interaction with mainstream Dutch speakers, Limburgers use the language that asserts their higher status identity (Australian citizen). They are also denying the standard speakers the right to impose their variety as the language of intergroup communication; this is "creative" behaviour in intergroup terms, and reveals the underlying group tension which may have been less apparent, linguistically speaking, in the Dutch context. In fact, it seems there is a history of tension between the Limburgers and the mainstream in Holland which is not present, for example, for Swabians vis-a-vis mainstream Germans in the German context. The Brabant speakers, occupying a geographical buffer zone between the Limburgers and the powerful northerners, have adopted a policy of accommodating to the powerful group. It is interesting to see the consequences of this situation being played out in the new context of Australia, which allows the Limburgers to turn the tables linguistically on the majority Dutch.

In another study, Pauwels (1986a) reports on the attitudes of Dutch immigrants to three speech samples characteristic of the Dutch-Australian community:

- a) Standard Dutch with a regional accent, almost transfer-free
- b) Dutch characterized by transfers, and code-switching
- c) unlimited switching between English and Dutch with a Dutch phonic pattern.

While the informants identified with and accepted the second guise, they refused to identify with or accept the third guise. Pauwels comments:

These informants seem more concerned with the linguistic

quality of their English than that of their Dutch since they refuse to identify with the third guise. Is this a reflection of their linguistic pragmatism, or does it reflect the pride they take in being credited by the dominant group with the status of the most proficient users of English among the immigrant groups of non-English speaking background? (Pauwels 1986a:14)

The themes of this comment - the intergroup context of a single powerful outgroup and a "pecking order" of minority groups; the strategy of coping with minority status by associating with majority values in order to win superiority over other minority groups; the linguistic implications of this, i.e. the higher status of the outgroup language and the neglect of the ingroup one; the attempt to win acceptance in the valuation of the outgroup - all these themes are easily explicable in social identity terms.

4. Italians in Sydney: Bettoni and Gibbons (1988) comment that the shift to English among Italians in Australia is much more rapid than one might expect given the demography of the Italian community. For example, Italians are more numerous than Greeks in Australia, yet the language is maintained less well. They hypothesize that the relative strength of demographic factors is weakened by the fact that few, if any, Italians in Australia speak Standard Italian, that their cohesion is threatened by the existence of numerous dialects and regional or popular varieties, and that their attitudes towards these non-standard varieties are mostly negative.

The informants in the study were asked to evaluate the following varieties:

- a) two dialects (Sicilian, Venetian)
- b) two forms (Sicilian, Venetian) of Regional Italian (i.e. Italian spoken with a heavy regional accent)
- c) two "light mixtures" of Regional Italian with a few lexical transfers from English well integrated phonologically
- d) two "heavy mixtures" based on dialects and Popular Italian

with numerous longer English elements pronounced with an Australian accent

e) English.

The evaluations were made using a version of the matched guise technique.

Briefly, both the dialects and the mixtures were negatively evaluated, while (Regional) Italian and English were highly evaluated. Most Italian immigrants in Australia speak dialect or one of the mixtures; Regional Italian is "the least spontaneous of the Italo-Australian varieties", according to Bettoni and Gibbons.

From the perspective of this paper, the following details of the study are of interest:

a) The evaluations of dialect and Regional forms do not match evaluations discovered in related studies in Italy. Social identity theory would explain this in terms of the changed intergroup context in Australia. In particular, dialects are more stigmatized:

Dialects in Italy rate favourably on personality traits such as "likeability" and "reliability", and even when they are not favoured they are never heavily stigmatized... This is in contrast with the Australian results, which on a wider range of traits and to a greater extent condemn the dialects.

Bettoni and Gibbons offer the following explanation:

In Italy Dialects are more positively valued because they are more widely used by people of all socioeconomic classes, whereas after migration they become restricted languages shared only by other low-status immigrants of the same narrow geographical origin.

b) The Dialects are more strongly seen as marking ethnicity in this study than the Regional Italian, even though (or perhaps as a result of which) attitudes towards them are more negative than to the Regional Italian. Social Identity Theory would say that as the ethnic identity is stigmatized in the Australian context, so should the linguistic marker of that identity be.

c) The disapproval of the heavy mixture variety may be

explained in exactly the same terms as those used by Pauwels to explain the Dutch intolerance of a heavy mixture and relative tolerance of a light mixture, i.e. that there is more concern over English spoken badly than over Italian spoken badly.

d) There is at least one dimension on which, in terms of social comparison, the Italian immigrants can achieve a clear positive distinctiveness: Italian is the language of a great culture. Bettoni and Gibbons offer this as the explanation for the high regard given to (Regional) Italian, even though it is the least "spontaneous" variety for this group. They summarize their findings as follows:

Linguistically Italians value their past in a highly selective way which does not include the narrow confines of either their original Italian town, or their ethnic group in Australia.

This is a further example of the importance of the symbolic rather than the communicative function of a language in social identity terms. There is an interesting comparison here with the role of Hebrew in the Jewish community.

5. Russians in Sydney and Melbourne: Kouzmin (1988) reports on language attitudes in two Russian communities in Melbourne and Sydney. The two communities are a post-Second World War second wave and a post-1974 third wave. The groups are rather different in that the third wave are overwhelmingly Soviet Jews. The absence of a symbolic function for Russian for the third wave immigrants, and the instrumental nature of their support for Russian language maintenance, lead Kouzmin to conclude that for this group there will be no maintenance of Russian beyond the second generation.

One difference between the groups is the multiple ethnic identity of the third wave group. It is likely that ingroup and outgroup perceptions of the type outlined above in the Israeli study reinforce the self-perception of the third wave in terms of their Jewishness, rather than their Russianness, thus strengthening their links with the non-Russian speaking Jewish community. It may also be that because, as Kouzmin points out,

Russian symbolizes majority religious and cultural traditions, Russian Jews, who may have had a painful experience of the intergroup context in the Soviet Union, feel some ambivalence about these symbols in the Australian context. "Ambivalence" is I think the right word, as Jews are typically divided on such issues; this is expressed in some of the comments Kouzmin quotes, which reveal a split in opinion among Soviet Jews in Australia on the issue of Russian language maintenance. In terms of intergroup perceptions and the effect of context on social identity, the following remark from one of Kouzmin's informants is interesting:

"...while living in Russia, we weren't allowed to forget that we were Jews, and here we've suddenly become Russians."

It is not clear in whose eyes this is: other members of the Jewish community, or the majority society? If the latter, such a perception might conceivably lead to allegiance to Russian, if the intergroup boundary is "hard"; but a more likely outcome is that it will lead individuals to stress shared membership of their other ethnic membership group (the Jewish one), particularly as the Jewish/Gentile intergroup boundary is likely to be relatively "hard". Kouzmin herself comments as follows on this quote:

The discussion around the question "Russian or Jew" is an example of how perceptions of identity can alter with context. It also highlights the problem of interpreting core values, including the place of language, for a community as a whole, given that it is possible for members to have multiple loyalties.

6. Aboriginal creole-speaking communities: Work by Shnukal (1983, 1985), Sandefur (1985) and Harris (1986, 1988) traces the painful history of the origins of Australian creoles in the context of violent, even brutal intergroup contact. Australia has two creoles: Torres Strait Creole, spoken on islands in the Torres Strait, north of Australia, and Kriol, spoken in northern and north-western Australia. The development of the creoles is associated with the arrival of missionaries, who were seen as

offering protection and relief from an earlier period of violent attack and exploitation; in the case of the mainland Roper River mission, the period before the establishment of the mission in 1908 had been a particularly appalling one, with parties of Europeans actually hunting Aborigines to kill them. As far as the Torres Strait situation is concerned, Shnukal (1983:176) comments:

Thus when the London Missionary Society sought to place South Sea Island teachers on... the islands [in] 1871... the Torres Strait Islanders agreed, although reluctantly. After all, the LMS teachers were under white protection; their presence provided a curb on exploitation; and they offered in exchange to teach the Islanders the ways and language of the Europeans. The arrival of the LMS is still referred to as the "Coming of the Light", and celebrated each year on 1 July as the Torres Strait National Day.

The South Sea Islanders were in fact of mixed European and South Sea Island descent, and as *apkas* ("half-castes") were highly regarded because of their light skins and straight hair, particularly as marriage partners. They settled in considerable numbers on one of the islands, were figures of privilege and status, and were seen as accessible intermediaries between the Torres Strait Islanders and the Europeans. The situation is almost a textbook example of the processes of social categorization and social comparison.

The linguistic consequences of the situation were profound, above all because, even though the South Sea Islanders themselves spoke a pidgin in interaction with Europeans, they were believed to be speakers of English, as they were seen communicating with English speakers. Thus the pidgin and subsequent creole were believed to be English, a fact which gave them powerful status. The creole came to replace the Torres Strait Island languages, which were stigmatized as belonging to the "dark, uncivilised" past and as inappropriate to the new society being created" (Shnukal

1985:231). At Roper River, the creole was formed in dormitories of children living on the mission, in many cases children who had been forcibly taken from their parents or whose parents had been murdered. The children embraced the new creole with enthusiasm and pride, and rejoiced in their new identity as the children of the mission. This was a conversion in more than a religious sense.

The formation of the Australian creoles is a powerful example of a phenomenon that Tajfel has described, "the internalization by members of minorities of the 'outside' views about them" (Tajfel 1981:234). The more violent is the oppression, the stronger may be the impulse to identify with the oppressor as a mechanism for coping with the situation.

Conclusions : The analysis in this section may make one pessimistic about the chances for enduring multilingualism in Australia. Efforts should be directed at the Anglo-Celtic majority as much as at ethnolinguistic minorities to improve the chances of minority language survival. For example, admired mainstream figures who have bilingual competence can be highlighted. We need a Bob Hawke who can speak a language other than English well, and who is admired for it. If the mainstream can come to see bilingualism if not the norm, then at least a possible way of being "Australian" in a typical or mainstream sense, this will ease the pressure on bilingual communities and give them some space in which to cultivate their bilingual resources for their own and the community's benefit.

Suggestions for Recommendations

The preceding discussion has shown that bilingualism is not in any way detrimental to children's linguistic or cognitive development. For their emotional development, particularly for their relationship with their parents, speaking the parents' language at home might be mandatory in some cases. Reasons for the high rates of school failure among bilingual children, as observed in

many countries, must be sought in socio-economic and cultural differences between the immigrant group and the ruling class in the host society.

In the light of the research findings presented in the preceding sections, parents should be encouraged to communicate with their children in the language they feel most comfortable with and in which they are most likely to present their children with the best quality of interaction in terms of sustained interaction, shared play and introduction to their own way of thinking. Use of an unfamiliar language may dwarf the verbal interaction in the family and estrange parents and children.

Parents should be urged to be consistent in their language choice in order to facilitate the acquisition of the two languages as independent systems. A rich and varied input in the minority language is important for the development of sophisticated language skills which will lead to cognitive benefits for the bilingual child. Parents should be given advice and assistance in the accomplishment of this.

Being informed about the course of bilingual development, the range of linguistic behaviour to be considered normal and the cognitive advantages of high levels of bilingualism, will help parents to have faith in their children's ability to master the linguistic challenge. It will also enable them to cope with uninformed advice and criticism.

Since the ability to appreciate decontextualized language is central to the Australian school system, it is necessary that parents realize the importance of reading books to their children. Children are never too young or too old to be read to. Unfortunately, even among parents who in principal believe in reading to their children, reading activities are often limited to the pre-school and early primary school years. Under two years of age children are often thought to be too young to appreciate books, and once they can read themselves many parents consider it unnecessary to read to them any longer. Book sharing is the more important in

78 Psycholinguistic aspects of bilingualism

a minority language in order to ensure the development of high levels of language aptitude inspite of restricted input and a limited set of experiences.

The community should take steps to support parents in raising their children bilingually as well as in preparing them for life in a society based on literacy. This can be done through:

- libraries providing pre-school story books in languages other than English;

- health workers and social workers counselling parents or other caregivers to read books to children from a very young age on;

- literacy classes for adults which do not only teach how to read and write but also transmit the importance of literacy in our society and urge parents to read to their children;

- professionally guided playgroups which help NESB parents to acquire skills in how to read and play with children and knowledge about pre-school materials customarily used in Anglo middle class families (books, puzzles, board games, arts and crafts materials, etc) as well as provide a forum for parents for exchange of experience and incidental learning;

- Cummins suggests L1 education while BICS in L2 are developing through peer interaction, in order not to allow a gap in academic achievement to develop in early school years. This is in agreement with the UNESCO recommendations of 30 years ago. General academic proficiency will easily be transferred from L1 to L2, due to interdependence of cognitive development.

Parents should be aware of the immense pressures against bilingualism in the community, and realize that conscious effort and intervention are called for. Bilingualism is not a natural outcome of social forces in Australian society at present. In particular, monolingual English-speaking families need to be made aware of the personal and social benefits of language knowledge, and efforts should be directed at highlighting second language competencies in Australians known to appeal to the

Australian mainstream whenever they occur.

The following books can be recommended to parents and professionals for further reading:

Arnberg, L. (1987) *Raising Children Bilingually: The Preschool Years*. Clevedon: Multilingual Matters

de Jong, E. (1986) *The Bilingual Experience*. Cambridge: C.U.P.

Harding, E. and P. Riley (1986) *The Bilingual Family : A Handbook for Parents*. Cambridge: Cambridge University Press

Saunders, G. (1988) *Bilingual Children: From Birth to Teens*. Clevedon: Multilingual Matters

Trelease, J. (1986) *The Read-Aloud Handbook*. Richmond, Vic.: Penguin

Wells, G. (1986) *The Meaning Makers*. Portsmouth, NH: Heinemann

Much recommended is *The Bilingual Family Newsletter*, edited by George Saunders. This Newsletter is published by Multilingual Matters and appears four times a year. It provides a forum for the exchange of experiences bilingual families have as well as expert advice.

THE SOCIOLINGUISTIC ASPECTS OF BILINGUALISM: BILINGUALISM AND SOCIETY

Dr. George Saunders

University of Western Sydney, Macarthur

Sociolinguistic aspects of bilingualism

Sociolinguists have shown how language can be studied in relation to its social environment. As Fishman (1971:4) defines it, sociolinguistics is "the study of the characteristics of language varieties, the characteristics of their functions, and the characteristics of their speakers as these three constantly interact, change, and change one another within a speech community." Hymes (1967) and Ervin-Tripp (1964) have pointed out that language always exists and functions within some social context. Therefore, the description of language should reflect its function in the local society.

In examining the sociolinguistic aspects of bilingualism in Australia, therefore, we must go further than just looking at the purely linguistic aspects. We must also look at how language varies, and also at the purpose language serves besides the obvious one of transmitting thoughts from one person to another. Speakers also use language(s) to make statements about who they are, what their group loyalties are, how they perceive their relationship to their hearers, and what sort of speech event they consider themselves to be engaged in. These two tasks (communicating information and defining the social situation) can be carried out simultaneously because language does vary - speakers can choose among alternative linguistic means, any of which would satisfactorily communicate the propositional information.

It is the selection among these alternatives which defines the social situation (Fasold 1984:ix).

This paper, therefore, examines bilingualism in Australian society and looks at the factors, both linguistic and social, which influence the attainment and maintenance of bilingualism. In the literature, definitions of bilingualism cover a wide spectrum of proficiency (Saunders 1988:7), ranging from being taken for a native speaker by native speaker of both languages (Thiéry 1976) to beginning to understand utterances in a second language (Diebold 1961). For the purpose of the Bilingualism Project of the Australian Second Language Program, bilingualism is interpreted as a high level of competence in two languages, but not necessarily equal or near equal competence. This is a realistic definition and a worthy and realisable goal, which, when attained, will be of great benefit both to the individual bilingual and to Australia as a whole. Australia has a large pool of people who already speak languages other than English and for whom the type of bilingualism just defined is attainable, provided varying degrees of support are made available, in the form of official encouragement of the maintenance and development of these languages. Given proper opportunities and facilities, motivated children from solely English speaking backgrounds could also achieve or approach such a level of bilingualism by the end of secondary schooling (the proficiency in English of many upper secondary school students in European countries such as Sweden, Germany, vouches for the feasibility of this).

Communicative competence

In recent years, many findings of sociolinguistic research have been carried over to language teaching. One concept in particular, namely **communicative competence**, has tended to become something of a vogue word in language teaching in recent years. The term communicative competence evolved as a result of a shift of emphasis among theorists in linguistics, a move away

from the rules of language form, traditionally associated with grammar, vocabulary and pronunciation, towards an emphasis on the ability to use language (Færch, Haastrup & Phillipson, 1984:167).

Communicative competence can be said to consist of the following:

Phonology/orthography, grammar, and lexicon. This knowledge is often referred to as **linguistic competence**, but it should not be seen as an alternative or counterpart to communicative competence - a person can hardly be communicatively competent without being linguistically competent.

Pragmatic and discourse knowledge, which together could be called **pragmatic competence**. Pragmatic competence provides the link between linguistic competence and actual *language use* in specific situations. It accounts for speakers' capacity to act by means of language in ways which are appropriate to their communicative intentions, to the contexts in which they communicate, and to the discourse into which their verbal contributions fit (Færch, Haastrup & Phillipson 1984:168). A speaker could be linguistically competent, i.e. have a good pronunciation, good grammar and a good vocabulary, yet not be communicatively competent, because s/he has not mastered the rules of how to apply this linguistic knowledge appropriately in specific social situations. For example, a teenager who has grown up in Australia and has spoken German at home, but rarely outside the home, and has had no formal instruction in German, may be communicatively competent in German only in this home domain, but not in other domains which require different levels of formality, or in domains which require literacy in the language. In other words, besides linguistic knowledge one needs to know how to act in accordance with the sociocultural conventions of the target language community.

Fluency, i.e. speakers' ability to express what they want to say with ease, using whatever linguistic and pragmatic knowledge they have.

In traditional language teaching the emphasis was placed on linguistic competence. However, in recent times there has been a realisation of the importance and desirability of pragmatic competence. Unfortunately, some proponents of the communicative competence approach in language teaching have tended to distort the issue by presenting communicative competence as being somehow an alternative to, for instance, grammar, and as being predominantly concerned with the spoken language (Færch, Haastrup & Phillipson 1984:169). Communicative competence in fact covers the four skills of listening, speaking, reading and writing.

Emphasising the need for learners to master rules of grammar, vocabulary, pronunciation and spelling, for them to be communicatively competent, does not imply that this linguistic competence has to be correct *in all respects*. A common misconception is that teachers who emphasise linguistic competence are preoccupied with correctness, whereas teachers who give high priority to pragmatic competence have a more lenient attitude towards errors. However, it is quite possible for a teacher to believe that learners should master grammatical rules, and at the same time hold the view that learners cannot be expected to apply *all* the grammatical rules correctly. In this respect, it must be stressed that one should not equate communicative competence in native monolingual speakers of a language overseas with communicative competence in learners of the language or with communicative competence in Australian bilinguals who are not dominant in the language. The latter two groups are generally in situations which differ in significant respects from those of native monolingual speakers; for most individuals in these two groups, communication in the language serves a more restricted range of purposes, and the communication demands made on such speakers are usually less than on monolingual speakers.

It has been mentioned above that linguistic competence, which includes grammatical proficiency, is an important component of communicative competence. Krashen (1982) has argued

that **comprehensible input** plays an essential role in acquisition of a second language; if we are not able to impose meaning on what we read or hear, we cannot process the data (i.e. we cannot internalise it in our long-term memory, so no learning is achieved). We retain only that which we have made meaningful, since it has personal significance for us, or that which we have worked at deliberately and effectively to make it meaningful. Gass (1988) distinguishes between comprehensible input, which is controlled by the person providing the input, and **comprehended input**, which is controlled by the person doing the work to understand. Gass (1988) also makes the point that not all input which is comprehended becomes **intake**. Intake refers to the process of the attempted integration of linguistic information.

Swain (1986), however, believes that comprehensible input is not enough to ensure that the outcome will be native-like performance, and she has formulated her '**comprehensible output**' hypothesis to attempt to explain this. Her research, based on data from the French immersion programs in Canada, showed that these children had had years of comprehensible input, as evidenced by their ability to master course content. Yet, in certain areas, e.g. grammatical proficiency, their second language ability was far below that of native speakers. (In this respect, their linguistic situation is very similar to that of second generation speakers of languages other than English in Australia (Saunders 1989). To approach or reach native speaker competence, Swain believes that learners must also produce **comprehensible output**, by which she does not mean just getting a message across, since this can be done with grammatically deviant forms and sociolinguistically inappropriate language. What she means is "being pushed towards delivery of a message that is not only conveyed, but that is conveyed precisely, coherently and appropriately." However, in the Australian context it is not easy (nor perhaps advisable) for parents to frequently "push" their children to speak correctly and appropriately in a language used only in the home. Usually it is only when an utterance is not understood

or is misunderstood or the children make an error which the parents consider particularly bad, that the children are forced to correct their speech or to seek linguistic assistance. Persistent insistence on correctness may reduce the children's motivation to speak the language. (In a study of a dying Australian language, Dyirbal, Schmidt (1985:18, 38-40) lists constant correction by older fluent speakers as one of the main reasons young people are inhibited from speaking the language to them.) As children get older and realize that their language is lacking or deviant in certain areas and desire to overcome these deficiencies, strategies can be developed to assist them.

Susan Gass (1988) sees this perception by learners that there is a mismatch between native-speaker speech and their own grammars as an important first step in providing motivation for them to modify their own speech. However, where children have relatively limited exposure to a language, they will not perceive many such mismatches without assistance (Saunders 1989). Even when they do perceive such a mismatch, provided they are being understood, they need to be motivated to make the effort to correct what may have become fossilised deviations in their speech. The best motivator of comprehensible output would seem to be a stay in a country where the language has to be used in virtually every aspect of daily life. However, it is also obvious that some form of bilingual education or advanced language classes provided in the normal education system would aid in creating situations where comprehensible output would be required more from children than would be the case in the family environment. This writer has seen the benefits of such advanced language tuition at an Australian tertiary institution for young adults who enter the course with "only" their family German or Italian. They have a tremendous linguistic foundation on which to build.

Languages spoken in Australia: some statistics

English is the *de facto* national language of Australia and is

the first and usually the sole language of about 83% of the population of sixteen million (Lo Bianco, 1987:10). Just under 2% of the population over the age of 15 speak English 'not at all' or 'not well' (Lo Bianco, 1987:23). Primarily because of Australia's position as a country of immigration, many of its citizens and residents, not only those born overseas but also those born in Australia, speak not only English but also another language.

The 1986 Census showed, for example, that 13.6% of the population over the age of 5 used a language other than English at home. This represented an increase on the figure of 12.3% shown in the 1976 Census, although that census conducted ten years earlier had not restricted its question on language use to only one domain (the home) (Clyne, 1988:22). Indeed, it was most unfortunate that in the 1986 Census the question on language use was watered down to such an extent that meaningful comparisons with previous data (specifically the 1976 Census) have been made extremely difficult.

As mentioned above, the 1986 Census indicates how many people over the age of 5 use a language other than English in one domain only, i.e. the home. However, whilst the home is the domain where languages other than English are traditionally used most, there are many people who do use a community language regularly, but *outside* the home. For example, a Vietnamese married to an Anglo-Australian may use mostly English in the home, but use Vietnamese extensively in contacts with friends, acquaintances etc. outside the home. Similarly, older established languages (e.g. Italian, Greek) may be used by second generation adult children not in their own home but mainly in the parental home (Clyne 1988:22), or in the homes of older relatives. Indeed, the Australian Bureau of Statistics 1983 Language Survey indicates that all major community languages (except Vietnamese) are used more with relatives and friends and friends than in one's own home.

The 1986 Census reveals (Clyne 1988:22) that there are 12 languages other than English which are used at home by over

88 Sociolinguistic aspects of bilingualism

50,000 speakers, three by over 30,000 and another three by over 20,000. The table below shows the 13 numerically strongest languages in Australia as a whole based on home use statistics from the 1986 census. Figures from Clyne's (1982:12) analysis of the 1976 Census (based on "regular use", no "home use") are given for comparison.

	1976	1986
Italian	415,765	444,672
Greek	277,472	262,177
Serbo-Croatian	140,575	142,407
Chinese	139,100	29,903
Arabic	119,187	51,284
German	111,276	170,644
Spanish	73,961	48,343
Polish	68,638	62,945
Vietnamese	65,856	No figure given
Dutch	62,181	64,768
Maltese	59,506	45,922
French	52,790	64,851
Macedonian	45,610	16,693

Increases in numbers of speakers

As can be seen, certain languages show a considerable increase in the number of speakers in the ten year period, particularly Chinese (a 465% increase!), Arabic (a 232% increase) and Macedonian (a 273% increase). Also, Vietnamese, which in 1976 was not significant enough to be processed, in 1986 had a significant number of speakers. The huge increase in the number of Vietnamese and Chinese speakers can largely be attributed to the influx of refugees from South-East Asia. Spanish, Maltese and Polish have also shown a significant increase in the numbers of

speakers. Clyne (1988:23) believes that the increase for Maltese and Macedonian could be attributed to an 'ethnic revival' and acceptance of multiculturalism in Australia. However, since the Census question specifically asks about 'home use', this writer agrees with Clyne's (1988:23) assessment that the responses given in the 1986 Census "can be regarded as a reasonably accurate reflection of home domain language use."

The increase in the reported number of home users of Macedonian between 1976 and 1986 can almost certainly be traced back to the influence of Australia's policy of multiculturalism (Clyne 1988:23) which increased tolerance and acceptance of cultural and linguistic diversity among the Australian population as a whole and encouraged the various ethnic groups to take pride in their linguistic and cultural heritage. Macedonian speakers in Australia come from both Yugoslavia, where Macedonian is one of the national languages, and from Greece, where it is not even recognised as a language. Consequently, it is possible that some of the Macedonian speakers from Greece were reluctant to list themselves as such in 1976 Census. But then, in 1986, with the multiculturalism policy's encouragement of minorities, this minority within a minority felt sufficiently confident to acknowledge their home language. It is also possible that Yugoslav speakers of Macedonian recorded their language simply, as "Yugoslav" in the 1976 Census or declared themselves speakers of more prestigious languages (Serbo-Croatian, Bulgarian) (Clyne 1985:7).

Between the 1976 and 1986 Censuses there was an upsurge of interest and pride in the Maltese language among the Maltese community in Australia. Maltese Saturday schools were set up, Maltese was introduced as a Higher School Certificate subject and Maltese language programs were developed in primary schools (Clyne 1988:23). Many Maltese migrants came to Australia literate in English, formerly the language with the highest status in Malta. However, nowadays, Maltese has displaced English in most formal domains in Malta, something Maltese

immigrants are aware of and which has given them an awareness of the importance of Maltese as a language per se and as a marker of their ethnic identity and heritage. Clyne (1988:23) reports that many adults of Maltese descent have learned (or relearned) their parents' language. This combination of factors would seem to account for the 130% increase in use in the decade between 1976 and 1986.

Clyne (1988:24) attributes the increased in Arabic and Spanish chiefly to new immigration, the emergence of an Australian-born second generation using the language, and the fact that the under 5 age group not counted in the 1976 Census were now old enough to be included.

Between the 1976 and the 1986 censuses there was also a significant increase in the number of speakers of 'Filipino languages' and Indonesian/Malay. In the 1976 Census the number of these speakers was too insignificant to be processed, however, in 1986 there were 25,746 speakers of 'Filipino languages' and 19,887 Indonesian/Malay speakers. 'Filipino languages', especially Tagalog/Pilipino, have been brought to Australia by recently migrated families, while the Indonesian/Malay-speaking communities are the product of both migration and student movement (Clyne 1988:22).

Decline in number of speakers

In the case of German, Italian and French, there was a significant drop in the number of speakers recorded. There was 35% (N=59,368) less German speakers, 6.5% (N=28,907) less Italian speakers and 18.6% (N=12,061) less French speakers. Clyne (1988:24) suggests a number of possible reasons for this decline. Firstly, there is the difference in the wording of the question between the two censuses, from 'regular use' to 'home use'. With all three languages there is, according to the 1983 Survey by the Australian Bureau of Statistics, a significant difference according to domain:

	German	Italian	French
Home Use	48.3%	81.9%	66%
Friends/Relatives	83.6%	96%	87%

Secondly, these three languages are languages widely taught as school subjects. In his analysis of the 1976 Census, Clyne (1985:9) reports that it was necessary to adjust the statistics obtained to allow for the fact that learners of German, French and Italian who used these languages only in the classroom had stated in the Census that they used them regularly. (The question did not specify any level of proficiency). Clyne (1988:24) now believes that even these adjusted figures were most likely inflated, with a considerable number of children from appropriate ethnic backgrounds using the language only in the classroom.

Thirdly, about 30,000 Italian-born persons either returned to Italy or died (Clyne 1988:24).

Fourthly, the 'home use' question on the 1986 Census does not take into account many speakers of German, French, Italian and many other languages, simply because they use the language only in various domains other than the home, e.g. German is used as a lingua franca between some members of various ethnic groups (e.g. Hungarians and Czechs). (Indeed, even the 1976 Census would not have recorded all speakers of languages other than English because it asked about regular use; there must, however, be a considerable number of people who are proficient in a language but do not use it regularly, e.g. a Polish speaker living in a small country town where there are no other Poles and who uses Polish only when visiting friends elsewhere.)

Distribution of languages

The 1986 Census results show that of the ten most widely used home languages other than English (namely Italian, Greek, Chinese, Serbo-Croatian, Arabic, German, Spanish, Polish,

Vietnamese, Dutch), five are in the 'top ten' in each state and territory: Italian, Greek, Serbo-Croatian, German and Chinese (Clyne 1988:25). Polish has this status everywhere except in the Northern Territory, Dutch and French everywhere but in Victoria and NSW, Vietnamese everywhere except in South Australia and Tasmania.

Arabic, which is the fifth most used home language in Australia as a whole, owes this position to its strength in two states: 74% of Arabic speakers live in NSW and 20.5% of them in Victoria. Spanish and Vietnamese are in a similar position: 58% of Spanish speakers live in NSW, and 25% in Victoria, 39% of Vietnamese speakers are in NSW, 33% in Victoria.

Of the 40,790 home users of various Aboriginal languages, 56% live in the Northern Territory, 20.6% in Western Australia, and 12.3% in Queensland.

When the statistics for home language use are looked at for individual states, there are some interesting findings. For instance, in Tasmania, Australia's smallest state, both in size and population, Dutch is the most commonly used home language after English, with 2,013 speakers, closely followed by German (1,999 speakers), then Italian (1,590), Greek (1,508) and Polish (1,499); no other language has more than 1,000 speakers.

Language maintenance and shift: some statistics

Speakers of minority languages (immigrant or indigenous) in Australia, who are at a distinct numerical disadvantage in comparison with the speakers of the majority language, English, and who have to learn and use English to participate effectively in Australian society, may for various reasons give up speaking their minority language and use English only; this is called **language shift**. **Language maintenance**, as the term implies, is the opposite of this, that is, the minority language is retained.

Most studies of immigrant communities show that language shift increases with each generation. The typical scenario, in

simplified form, is that the first generation immigrants who arrive after puberty become bilingual but remain dominant in their immigrant language, the second generation and generation 1b (who migrated before puberty) are bilingual but dominant in the majority language, the third generation is monolingual in the majority language. By the fourth generation, even in language groups with good language maintenance records, the immigrant language has disappeared. In Koori (Aboriginal) communities language shift to English becomes more probable the smaller a particular language group becomes and the more contact it has with English-speakers and institutions (e.g. Schmidt's 1985 study of Dyirbal in its dying stages).

There are considerable differences among the various ethnic groups in Australia with regard to the rate of language shift to English. The following table, based on information from the 1976 Census (Clyne 1985:41), shows this clearly:

Country of birth	Language shift in first generation speakers in Australia
Greece	3.00%
Italy	6.26%
Yugoslavia	9.54%
Poland	20.18%
Germany	27.79%
Malta	30.49%
Netherlands	43.55%

Possible reasons for these differing rates of language shift will be examined below. The language shift in the second generation can be expected to be greater than for the first generation, if only because the number of potential passers-on of the language has already been reduced by the shift to English among the first generation. This is borne out by the following table (adapted from Clyne 1985:43):

Country of birth of both parents	Language shift in second generation
Greece	10.08%
Italy	18.56%
Malta	53.68%
Germany	62.28%
Netherlands	80.79%

As can be seen, the preceding table shows the extent of language shift in second generation speakers whose mother and father share the same mother tongue. The increase in language shift is even greater when one of an Australian-born child's parents is a native speaker of English, a not unusual situation in present-day Australia, since in such cases it is rare that the English-speaker is proficient in the other language and English becomes the language of the marriage and of the home :

Birthplace of ethnic parent	Language shift in Aus.-born children with one English-speaking parent
Greece	68.40%
Italy	78.51%
Malta	94.58%
Germany	96.16%
Netherlands	99.09%

(Adapted from Clyne 1985:51)

There are, of course, also marriages where each partner has a different immigrant language as his/her mother tongue. Very few Australian-born children of such marriages are likely to maintain either their mother's or their father's language, although the possibility is slightly higher than if one of their parents is a native English speaker. The one exception to this seems to be be children in Italian-Greek marriages, especially those with an Italian father and a Greek mother: 51% maintain

Italian and 47% maintain Greek.

If we compare the rate of language shift revealed by statistics from the 1976 Census with information so far gleaned from the 1986 Census, the following picture emerges:

Country of birth	Language shift in first generation (1986 Census)	Language shift in first generation (1976 Census)
Greece	4.4%	3.00%
Italy	10.5%	6.26%
Yugoslavia	9.5%	9.54%
Poland	16.0%	20.18%
Germany	40.6%	27.79%
Malta	25.9%	30.49%
Netherlands	48.3%	43.55%

(Adapted from Clyne 1985:41 and Clyne 1988:27)

As can be seen, there has been an increase in language shift among Greek, Italian, German and Dutch speakers, whilst there has been a decrease among Polish and Maltese speakers, and no change among Yugoslavs. 1986 figures for language shift in the second generation are not yet available.

Reasons for language shift and maintenance

Intra-ethnic marriages

There are many reasons why particular persons might maintain their parents' language, whilst others might shift to using English only (or predominantly). In marriages between native English speakers and speakers of other languages, English is the language used between spouses in the vast majority of cases. This means in many cases that the immigrant partner will shift to using English predominantly, and in the majority of cases, unless s/he feels strongly about passing this language on to the next

generation and has the support of his/her partner, this will also be the language s/he uses to the children. Such marriages are relatively common in Australia. Price & Pyne (1977) show, for instance, that for the period 1969-73 38% of males and 24% of females from twelve different groups of immigrants born in non-English-speaking countries married Australian-born persons.

Fear of negative influence on acquisition of English

Even when parents themselves retain their own language in Australia, why is it that so many fail to pass it on to their children (e.g. 81% of Dutch speaking parents fail)? In some cases, they simply do not try to do so; they see little point in their children speaking any language other than English, since this is where they will be living and growing up. They are often reinforced in their attitude by the popular view, aptly called by Clyne (1974:65) a "prize fallacy", that the children will learn English better if they forget their home language and if only English is spoken at home.

This is, unfortunately, a view also held by some (usually monolingual) teachers who actively discourage parents from speaking their own language to children at home. The assumption is that by subtracting one of a bilingual's languages the other must necessarily improve (Saunders 1988:35). However, this assumption fails to consider some important factors. Firstly, the parents' command of English may be defective or even quite meagre. For them to attempt to speak English exclusively to their children may mean that communication between parents and children is far from spontaneous or efficient. Moreover, the children are being presented with an imperfect model of English, perhaps with faulty pronunciation and grammar, which is hardly going to improve their proficiency in the language. The children may even come to look down on their parents' deviant variety of the language. In his investigation of 200 German-English bilinguals in Australia, Clyne (1967:116) concluded that maintaining a good standard of German did not go hand in hand with inferior

English (compare findings by Ruke-Dravina (1967:91) and Oksaar (1977) for children of Latvian and Estonian speaking parents in Sweden).

Cummins (1984b) states that there is considerable evidence that for minority children who are academically at risk, strong promotion of proficiency in their home language represents an effective way of developing a conceptual and academic foundation for acquiring proficiency and literacy in the language of the school. Thus, even parents with little proficiency in English, the language of almost all schooling in Australia, can assist their children academically by providing them with as much input as possible in *their own native language*.

Also worth mentioning here are a few of the negative consequences of parents' *not* passing on their language to their children. If the parents' English is not good, difficulties with, or even a breakdown in, natural communication between children and parents can result, particularly as the children get older and conversations demand a higher level of linguistic proficiency. If the children do not acquire their parents' language, they are then most likely cut off linguistically from grandparents and other relatives in their parents' country of origin. Even if their grandparents, etc., have also migrated to Australia and have managed to acquire a reasonable knowledge of English, there is research evidence (Clyne 1977) that migrants over 60 revert more and more to their first language, this reversion being accompanied by a clear decline in ability in their second language; communication between the elderly and their family is hindered if the children and grandchildren have lost the ability to speak the home language - a common complaint in Hearst's (1981) study of immigrant elderly from 18 different ethnic communities in Australia.

Lack of knowledge of normal bilingual development

Some parents do begin to bring up their children bilingually in Australia, but abandon the attempt in the early stages, primarily

because of lack of readily available and reliable information on the bilingual upbringing of children. For instance, a lack of knowledge about what is normal in bilingual language acquisition, has led many a parent to decide to give up the idea of raising a child bilingually. Children who are exposed to two languages from birth, either both in the home, one from each parent, or to one language in the home and one in the environment, go through certain stages of language development just as do monolingual children. The difference is that when they begin to speak around the age of 12 months, they have for a while some names for some things in one language, some names for different things in the other language, but initially with no overlap (Saunders 1988:51). The child may produce more words in one language than the other, and the words s/he does use may be used indiscriminately, i.e. without regard to the language which should be used to particular persons. Gradually, the child will begin to use a word in each language for a particular concept and will learn which people are to be addressed in which language. By about age two, children who have been exposed to both languages will be keep the two more or less separate, although few children (or adults) manage to keep their two languages completely separate (as the discussion of transference and code switching elsewhere in this paper clearly indicates).

A common finding (Saunders 1988:124) is that young children go through a stage when they are reluctant to speak the minority language and answer their parents in English. This can be very disconcerting for parents and may lead them also to shift to English, in which case the minority language will not be passed on to the children. However, if parents persist in using their language to the children and urging the children to speak it too, this period of reluctance on the part of the children to speak the language can be overcome (Saunders 1988:125). If the children are not 'pushed' to actively use the language, even though the parents persist in addressing them in it, the children could become *receiving bilinguals*, i.e. understanding the language,

but unable to speak it or with only minimal speaking ability, answering instead in English. Receiving bilinguals are not uncommon in Australia. Clyne's (1968) study of 74 families with German-speaking parents and children either born in Australia or arriving in the country before the age of 5, shows that in 56 (75.7%) of the families the parents spoke only German to the children. Yet in only 16 (28.6%) of these 56 families did the children speak only German to their parents. In 27 (48.2%) the children spoke a mixture of English and German, and in 13 (23.2%) the children always answered their parents in English. A similar tendency is revealed by the research of Smolicz & Harris (1976) into the linguistic behaviour of other immigrant groups in Australia: the percentage of Polish, Dutch, Italian and Greek-speaking parents using only their language to their children is considerably higher than the percentage of children responding in that language only.

Receptive bilingualism, i.e. understanding but not speaking a language, should also not be underrated; evidence suggests (e.g. Leopold 1957:6) that dormant speaking skills in a language can be activated given the appropriate circumstances; such circumstances would include a visit to or stay in a country where the language must be used in all aspects of everyday life, or through encouragement by means of bilingual education in Australia.

Unrealistic perfectionism

Whilst the bilingual developments just mentioned above are not abnormal, they can be worrying for parents and make them think that their child is being confused and disadvantaged by having to cope with two languages. It is also virtually inevitable that one of a bilingual's languages will be dominant, that is, stronger than the other, in one or more of the skills of speaking and listening comprehension (and later on, reading and writing). Ambilinguals, or bilinguals who are *perfectly* balanced in all as-

pects of two languages, are *extremely* rare; this writer has *never* met one! In the Australian context, most second generation speakers of languages other than English will become dominant in English, particularly once they begin school, and it is unrealistic to expect them to have the same competence in their home language as they attain in English. For this to be possible, the children would have to have access to high quality bilingual education or high level instruction in their home language, which to date is, unfortunately, very rare in Australia.

Some parents regard anything other than perfectly balanced bilingualism as a failure and cease speaking their own language to their children when they see that the children do not have the same command of the language as their peers in the linguistic homeland, that the language is influenced by English, etc. This is unrealistic and unfortunate, since these children receive much less input in the language than their age-mates in the linguistic homeland where all daily life is carried out in that language. Moreover, these children are not required to produce the necessary amount of 'comprehensible output' (Swain 1986) necessary to attain the same competence as monolingual native speakers. They develop strategies for getting their meaning across which are adequate for the situation they find themselves in: they are understood by their parents. But usually there is little social or cognitive pressure to produce language that reflects more appropriately or precisely their intended meaning. There is no push for them to analyse further the grammar of the language because their current output appears to succeed in conveying their intended message. Nevertheless, such children can acquire, in addition to a native speaker's proficiency in English, a very serviceable command of their parents' language just through using it in the family (Saunders 1988:24). In the Australian context, education authorities could help in language maintenance and development by providing such children with opportunities for bilingual education or at least advanced classes in their home languages; such provisions would help to give these children the

push needed to upgrade their comprehensible output. At present, the languages of many Australian children are tragically allowed to stagnate, to wither, and even to die. At this point it is worth quoting from the Australian National Languages Policy (Lo Bianco 1987:6-7): "The language pluralism of Australia is regarded as a valuable national resource enhancing and enriching cultural diversity and intellectual life and as a valuable economic resource in its potential for use in international trade. ... It is in Australia's national interests to develop the linguistic resources of its people..."

Fears that bilingualism could impair intellectual development

Some parents are discouraged from raising their children as bilinguals because they fear that bilingualism will impair their intellectual development. Such fears may be based on a common folk belief or on advice received from medical personnel, social workers, teachers, etc., who, although their training has (unfortunately) rarely included any information on research into bilingualism, feel qualified to pass on their own beliefs in the guise of expert opinion. (Saunders 1986a). There seems to be a reasonably common belief that many problems which children have (e.g. stuttering, slow progress at school) will be solved if only parents no longer spoke their own language to their children, i.e. that the transition from bilingualism to monolingualism will somehow effect a cure. Harding & Riley (1986:123) are very blunt in this respect: "It makes as much sense to ask your doctor about bilingualism as it would to ask him about your car." Until the professions mentioned above include bilingualism in their training courses, this will unfortunately remain largely true.

Until the early 1960s, most of the research into bilingualism which compared monolinguals and bilinguals indicated that bilinguals often lagged behind with regard to intelligence. However, much of this research has since been shown to have been conducted without controls nowadays considered necessary for

valid results, e.g. matching comparison groups for socio-economic status. Since the early 1960s most research has shown bilingualism in a very favourable light. Indeed, in the majority of studies comparing bilinguals and monolingual children, the bilingual children have performed better, often significantly better, than their monolingual peers. Peal & Lambert's (1962) famous research comparing 10 year old English monolinguals and French-English bilinguals found that the bilinguals performed significantly better not only on the *nonverbal* IQ tests, but also scored significantly higher on all tests of *verbal* IQ. Moreover, the bilingual children were found to be in a higher grade at school than the monolingual children of the same age, and also to achieve better results in their schoolwork than the monolingual children in the same grade. Peal and Lambert (1962:20) concluded that the bilinguals' experience with two language systems seemed to have left them with a mental flexibility, a superiority in concept formation, and a more diversified set of mental abilities, in the sense that the pattern of abilities developed by bilinguals were more heterogeneous. In contrast, the monolinguals appeared to have a more unitary structure of intelligence which they must use for all types of intellectual tasks. A large-scale follow-up study by Anisfield (1964) confirmed these findings.

Other studies (described in Saunders 1988:14ff.) have pointed to the fact that bilingualism can give children certain intellectual advantages over their monolingual peers.

Research by Ianco-Worrall (1972), Feldman & Shen (1971), and Cummins (1978) has shown that bilingual children analyse language more intensively than monolinguals and become aware at a much earlier age of the arbitrary nature of language, i.e. that names are arbitrarily assigned to objects and are subject to change.

Ben-Zeev (1977) and Ianco-Worrall (1972) found that bilingual children are capable of separating the meaning of a word from its sound at a much earlier age than monolingual children, something which Cummins (1976:33) points out, is "necessary if a child

is to use language effectively as a tool of thinking".

Scott (1973) found that bilingual children performed better on divergent **thinking** tasks. Divergent thinking is a special type of cognitive flexibility which some researchers see as an index of creativity, while others view it more cautiously, e.g. Lambert (1977:17) who calls it "a distinctive cognitive style reflecting a rich imagination and an ability to scan rapidly a host of possible solutions."

Carringer (1974) found bilingual children to be superior at **creative thinking**. He concluded that bilingualism promotes creative thinking abilities and serves to free the mind from the tyranny of words. Since bilinguals have two terms for one referent, their attention is focused on ideas and not words, on content rather than form, on meaning rather than symbol, and this is very important in the intellectual process since it permits greater cognitive flexibility.

Kessler & Quinn (1987:177) compared very low socio-economic grade 6 Spanish-English bilingual children in the USA with upper socio-economic grade 6 English-speaking monolingual children on their ability to solve science problems and to write scientific hypotheses after a 5 week science inquiry program. The bilinguals consistently outperformed the monolinguals on both the quality and linguistic complexity of their hypotheses.

In another study Kessler & Quinn (1987:181) found that bilingual children demonstrated a much higher level of **convergent thinking** by making greater use of metaphors - over twice as many as their monolingual peers. Whereas *divergent* thinking entails generating a large number of possible solutions to a problem, *convergent* thinking involves zeroing in on disparate objects and ideas, relating them to each other to find a commonality. "Metaphors are taken as indicators of the cognitively creative ability to utilize data in making generalisations and manipulating variables. In both aspects of creativity, linguistic and cognitive, the bilinguals appear to excel." (Kessler & Quinn 1987:180).

Experiments by Liedtke & Nelson (1968) confirmed Peal &

Lambert's (1962) conclusion that bilinguals were significantly better at **concept formation**, which is a major part of intellectual development. They surmise that this is because bilingual children, by virtue of their two languages, are exposed to a more complex environment and to a greater amount of social interaction compared to children acquiring only one language.

These studies give a bright picture of the effects of bilingualism on children's intellectual development. However, it should be noted that the bilingual children in these studies were chosen because they showed no great differences between their two languages, although they were by no means equally proficient in both. Cummins (1976:23) hypothesises that "those aspects of bilingualism which might accelerate cognitive growth seem unlikely to come into effect until the child has attained a certain minimum or *threshold level of competence* in his second language." However, it would seem that this threshold is well within reach: the children in the studies just mentioned who were, according to fairly lenient assessment criteria, considered balanced bilinguals, had clearly reached this hypothesised level of competence.

An investigation by Kessler & Quinn (1982) indicates that bilingualism increases adeptness at divergent thinking even in the case of children who are *not* fully proficient in their two languages.

Various researchers, such as Doyle *et al.* (1978) and Ben-Zeev (1977a), have found that there is one type of test in which bilinguals frequently perform worse than monolinguals, namely in tests of vocabulary. The reason for this would seem to be that bilingual children have to learn two different labels for everything, one for each language. This reduces the frequency with which they will hear a particular word in either language. In other cases particular words may be associated with certain situations in which only one language is regularly used and the corresponding names in the other language may not (yet) be known. And since bilingual children are usually tested on their

knowledge of vocabulary in only one language, or if in both, in each language separately, it is possible that they will perform less well than similarly aged monolingual speakers of either of their languages. However, this does not mean that they know fewer concepts than the monolingual children. If the bilingual children's *two* languages are taken into account, their overall performance will usually improve significantly and they may then equal (as found, for example, by Bergan & Parra, 1979), or even outperform monolingual children (as found by Saunders 1988:144ff.).

From the evidence, therefore, it appears that if bilingual children have a reasonable degree of balance between their two languages, their overall intellectual development is not hindered and is, in fact, in many ways enhanced.

One type of child bilingualism needs to be included in the discussion here, for it has raised questions in a number of countries about the possible detrimental effects of bilingualism on children's intellectual development and academic progress. It occurs when bilingual children's *weaker* language is also the language of the school and the native language of their monolingual classmates and teachers. These children are in a "sink-or-swim" situation, this is submersion in the second language. Such bilingualism is often referred to as "subtractive" bilingualism, since in many cases the children's first language (the home language) skills are being replaced, or "subtracted" in the process of acquiring the second language (the language of the school). Such children's proficiency in the school language may appear quite good on the surface and indeed be adequate for everyday face-to-face communication and, as a consequence, their teachers may assume that if they cannot keep up academically with their monolingual peers the reason is not linguistic but lack of intelligence. However, as Jim Cummins (1984b:9) points out, to keep pace with their peers and to cope with more complex linguistic situations and to process and understand more complex subject matter, the bilingual children need also to acquire *academic* skills in the language of the school, and it can take some time to attain

such a level of competence. Ideally, such children should also receive assistance with their school work in their stronger language, i.e. their home language.

Weigt (1985), for example, shows in a study carried out in Hamburg, that many Turkish-German bilingual children from Turkish speaking homes there have been wrongly assigned to schools for children with learning difficulties (*Schulen für Lernbehinderte*) because their difficulties have not been recognized as being basically linguistic. These children *seem* to have a reasonable command of German, but this command is deceptive and superficial, being satisfactory only for simple, everyday conversation. When even quite limited use of Turkish was made in class by a Turkish speaking aide, the children showed a marked improvement in comprehension of lessons and increased their active participation in class discussions in *German*, their weaker language.

Language ecology factors

In 2.5.1. to 2.5.5. we have looked at reasons why parents make a decision not to pass on their languages other than English to their children, often because of false advice and/or lack of information about normal bilingual development and about the effects of bilingualism on children's intellectual development. We will now look further at language ecology, the relation between languages and their environment, a term which stresses the wholesomeness for the human environment of the maintenance (and development) of multilingualism (Clyne 1985:27).

There are a number of clearcut factors favouring language maintenance (Kloss 1966, Clyne 1985:29ff.):

Grandparents

The presence of grandparents in the home or who visit regularly greatly helps maintain the language not only in their children but in their grandchildren. The extended family may be

more conducive to language maintenance than the nuclear family.

Availability of the language as a school subject

This raises the status of the language in the eyes of parents and children and makes the language appear "useful" since the children can benefit from their knowledge in educational assessment, e.g. a Vietnamese speaking teenager will be much more inclined to maintain and develop his/her Vietnamese if the language is offered as an HSC subject. If the language can then be studied at tertiary level, the motivation is even greater. Rubino (1987:132) reports on the effect even two hours a week of Italian during normal school time had on a group of Australian primary school children who speak Italian at home: all the children showed a positive attitude towards the use of Italian.

International status of the language

Related to (ii) is the perceived status and usefulness of a language in international communication. Pauwels (1980), for instance, found that Dutch migrants often prefer their children to learn a more "useful" language than Dutch, such as German or French.

Linguistic enclaves

These are areas where 80% of the population mainly uses the minority language and where the language can obviously maintain much of the vitality it had in its country of origin. In earlier times in Australia such linguistic enclaves existed, to take but one example, in the Barossa Valley in South Australia. In the 19th century almost the entire population was German-speaking. It had an independent identity and German was the language of church and community and was used side by side with English in the schools. Nowadays, smaller linguistic enclaves have arisen

particularly in parts of the major cities, e.g. the large community of Vietnamese speakers in Cabramatta in Sydney, where much of everyday life (e.g. shopping, banking) can be carried out in the language other than English.

Biliteracy

This is a factor which is not specifically mentioned by Kloss or Clyne, but which is in this writer's opinion a clear-cut factor working for language maintenance. Many children growing up in Australia who speak a language other than English at home are not literate in that language, most of their experiences with literacy being confined to English, the language of most schooling. Smolicz & Harris (1977), for example, in their study of language use and maintenance among Australian students of various ethnic backgrounds, discovered that:

"The ethnic children's use of their native tongue in reading and writing was even more restricted than their ethnic speech patterns ... Two thirds or more of the students ... admitted they had very little or no competency in reading and writing their ethnic language."

Of 70 children of Polish-Polish parents, only 7% regularly wrote letters in Polish and only 1% regularly read books in Polish. Yet 83% of these same children spoke either only Polish or Polish and English to their parents, while all of them spoke Polish or Polish and English to their grandparents.

Literacy in the home language greatly extends its range of use and makes possible its reinforcement and enrichment. "Just" speaking a minority language in the home may not be enough to assure its maintenance, and certainly not enough to develop it to a level approaching that of the majority language, English, which children begin to read and write as soon as they start school. Once children can read, they are exposed to a wider range and greater richness of language than individual parents can possibly produce. Moreover, it is psychologically important for children to

be aware that their parents' language is also, like English, a fully-fledged medium of communication, with its own literature, its own writing conventions, etc. Children tend to regard a language which they can speak but not read as not being equal to the language of the school which can be used for all functions.

Saunders (1988:198ff.) points out that, ideally, children should have the opportunity to become literate in their home language, as well as English, in the normal school system. In the absence of support for their language in the normal education system, some ethnic groups have established Saturday schools in an effort to have this literacy function performed for them. However, where neither opportunity is available, parents should receive encouragement and information on how they themselves can introduce their children to reading and writing in their home language. The evidence suggests (Saunders 1988:200) that such home literacy is quite within the capabilities of parents.

There is research evidence to indicate that children's acquiring literacy in their home language will not, as often feared by both parents and teachers, adversely affect their learning to read and write in English in the Australian school system, whether they become literate first in their home language before beginning school (as advised by Lado 1977, Christian 1977 and Andersson 1981), simultaneously in the home language and English (Saunders 1988:201, Past 1976, 1978), or first in English at school and then in the home language (Saunders 1984:3). Confusion (or transference) between the writing systems of the two languages is minimal if children become biliterate in the early years of schooling. Even when two different writing systems are involved, e.g. such as English and Hebrew, which is written in a different script from English and from right to left, very little confusion ensues. Evidence for this comes from Kupinsky's (1983) study of two kindergarten classes in an English/Hebrew bilingual school in Detroit, USA. The children receive instruction in Hebrew in the morning and in English in the afternoon. At the end of the 9 month program, the children's ability to read was similar in

Hebrew and English, although, understandably, somewhat better in English, their dominant language and that of the general non-school environment.

Availability of language maintenance services

The availability of **SBS radio and television** broadcasts has been a boon for language maintenance and development. Until the end of 1973 broadcasts in languages other than English in Australia were very scarce, and when available were limited by law to 2.5% of total transmission time; anything said had to be accompanied by an English translation. The fact that languages other than English now are freely used on radio and television serves also to bestow a sense of legitimacy and status on them. Such broadcasts not only help to maintain these languages but also help to keep Australian speakers of them in touch with new developments in the languages as spoken in the respective linguistic homelands. However, there are far too few programs for children.

The **ethnic press** serves a similar function, with most languages having at least a weekly newspaper which can be bought at newsagents in larger towns or can be subscribed to. Again, there is little provision for children. Some ethnic newspapers also advertise books, which can be bought, magazines which can be subscribed to or borrowed for a fee, and videos which can be borrowed for a fee. Many Australian **libraries** now stock books in the languages of the numerically strongest groups in their area and can obtain on interloan books (including children's books) in other languages.

A number of ethnic groups have established **clubs** where the ethnic language is spoken.

There are also a number of factors which are **ambivalent** (Kloss 1966, Clyne 1985:31), i.e. which can lead to either language maintenance or to language shift:

Educational level of the migrant

A higher educational standard facilitates a high cultural life around the immigrant language (favouring language maintenance), but it can also bring migrants into closer contact with the cultural life of Anglo Australians (which could favour language shift). More educated immigrants are more likely to have a good prior knowledge of English which means they do not have to concentrate on learning English and can devote more time to maintaining their own language, but at the same time they are not as dependent on their immigrant language and can integrate easily into English speaking society.

Less education is also an ambivalent factor. It promotes isolation from the dominant community (favouring language maintenance), but may mean a more limited range of cultural activities within the ethnic group (working against language maintenance). Lack of a good prior knowledge of English can mean that the immigrant mixes more with his/her fellow speakers (good for language maintenance), but it also means that s/he must devote more time to learning English (i.e. less time for language maintenance).

Numerical strength

If an ethnic group is large, it can afford extensive language maintenance efforts (e.g. ethnic schools, churches, cinemas), but because of its size it cannot avoid extensive contact with the dominant language and culture. However, closely knit small groups (e.g. the Estonians, Latvians, Ukrainians) can avoid multiple contacts with English and the accompanying culture. In the case of Aboriginal languages in contact with English, depletion in the number of speakers beyond a certain point lead to the demise of the language and a shift to English; Schmidt (1985:6) reports on the Aboriginal community at Jambun in Queensland which has a resident population of 100 and is the last area where

Dyirbal is spoken in sizeable community. Schmidt (1985:228) concludes: "The disappearance of Dyirbal appears imminent due to a gradual shift to a more prestigious English code."

Linguistic and cultural similarity

Immigrants who are linguistically and culturally similar to the Anglo-Australian majority are often prone to language shift because they do not have to make much effort to fit into the new society, e.g. the Dutch, whose language is closely related to English and whose culture is close to Anglo-Australian culture, and who show the greatest shift to English of any immigrant group in Australia. However, because of this closeness they could, in theory at least, also devote more time to maintaining their own language. Clyne (1985:31) points out that an important consideration here is the attitude of the host community to whether they *want* this minority to "assimilate" or not.

Attitude of the Anglo-Australian majority

A negative attitude towards, or even attempts at suppression of, a minority language may cause its speakers to shift quickly to using only the majority language. On the other hand, such hostility may cause the minority language speakers to fight determinedly to retain their language. (Both outcomes were evident in German speaking families in Australia during the two world wars.) Lack of institutional support for a language (e.g. no provision for, or even denigration of, it in mainstream education) can create the impression among parents and children that the language is unimportant or even inadequate, an attitude found by Schmidt (1985) among the remaining speakers of Dyirbal in Queensland. Children encountering continual antagonism towards their use of a minority language may be more susceptible than adults and reject the language (e.g. S ndergaard 1981).

Tolerance by the majority group of the minority language can also have opposite effects depending on circumstances. Such

tolerance can give minority language speakers, especially children, confidence in using their language. In some cases, however, lack of opposition to a minority language may lead to complacency among its speakers and result in no particular effort or interest being shown in retaining it or passing it on to the children.

A difference needs to be made here between tolerance and encouragement. Encouragement would be a clear-cut factor favouring language maintenance. If language maintenance is actively encouraged or supported by those in power, e.g. government or education department, this can give speakers of languages other than English pride in their languages and motivate them to maintain and pass them on to the next generation. Clyne (1988:23), for instance, attributes the rise in language maintenance among Maltese speakers between the 1976 and 1986 censuses in great part to the wide acceptance of a policy of multiculturalism in Australian society. It is to be hoped that implementation of the recommendations of the *National Policy on Languages* (Lo Bianco 1987) will encourage language maintenance in all ethnic groups in Australia.

Ethnic denominations

These promote language maintenance if services and social functions are held in the particular language, e.g. as in the Greek Orthodox Church. However, the Dutch Reformed Church in Australia has virtually shifted to the use of English, prompted by language shift in the Dutch speaking community, and thus this particular church has now really become an agent of language shift.

Political situation in the homeland

Many of Australia's immigrants are refugees. Some political refugees may associate their language with the oppressive régime they have fled from and shift to English, others may feel that the régime is an aberration and that it is their duty in exile to

maintain the type of language and culture which existed before the régime. Both attitudes can be found among refugees from Nazi Germany and, more recently, among refugees from Latin America.

Sociocultural characteristics

In some cultures language is seen as an important core value, e.g. in the Polish, Greek, and Italian cultures, perhaps in combination with other core values, e.g. Italian culture is family-centred and since the Italian language is considered vital to family cohesion, the two factors are intertwined; language shift among Italian speakers is low. Other cultures, however, do not see language as an important core value, e.g. the Dutch (who show the greatest language shift of all immigrant groups).

The form of languages other than English as spoken in Australia

Language change

All languages change and are not static, despite the protests of writers of letters to newspaper editors and, in some countries, despite the best efforts of official organisations which issue proclamations on language use (e.g. the Académie Française in France) and see change as a sign of decay or corruption of the language. However, linguistic change should be viewed as an inevitable and natural process, a process that has been going on ever since there have been languages. If this were not so, then, to take but one example, speakers of the Romance languages (Italian, Spanish, French, Portuguese, Romanian, Catalan, Romansch, Galician) would today still be speaking Latin, the parent language from which they all evolved. It is important to keep this in mind when considering the form of languages other than English as they are spoken in Australia.

When a language migrates from its homeland to another country it is inevitable that it will undergo changes because of the distance from the homeland, because of the new conditions and circumstances which its speakers face in the new environment. This happens, even if the migrating language becomes the majority language in the new environment, as English did in Australia. The first white settlers arrived speaking various regional varieties of English from the British Isles.

The distinctive nature of Australia English arose from this coming together of a number of regional dialects of English, a process called dialect levelling. Words used in only one dialect, for example, gave way to words with a wider currency. In addition, there was a totally new environment to be dealt with linguistically: flora, fauna, geographical features unknown to new arrivals from the northern hemisphere. But means were found to fill the gaps in existing English vocabulary.

Some words were adopted from the languages of Australia's original inhabitants, e.g. the word 'kangaroo' was first introduced into the English language by Captain Cook in 1770 from the Guugu Yimidhirr language spoken in the area around present day Cooktown; some existing words had their meaning extended to include something of similar appearance, e.g. 'magpie' was taken to refer to the uniquely Australian bird *Gymnorhina tibicen*, which is a species quite distinct from the European magpie (*Pica pica*); and descriptive compound terms were created from existing English words, e.g. native cat, bellbird.

Indeed, the languages already being spoken in Australia when the whites arrived underwent similar changes to deal linguistically with this alien culture, e.g. Dyirbal (Schmidt 1985) adopted English "potato" as *budida*, it extended the meaning of its word *bulmban* (grass spread out for a mattress) to cover a European-style bed, and from existing words coined a term for spectacles, namely *gayga gilaji* (= eye glass).

Languages in contact and transference

When a language migrates to a new country where it will be a *minority* language, it will not only undergo the changes briefly sketched above, but will also without fail come under the powerful influence of the majority language. To get on in the new country, newcomers will have to mix with and learn to communicate at various levels of proficiency with the majority community in the majority language. For many immigrants in Australia, for instance, English will be the language they hear and have to use most, their own language being more or less relegated to use in the home and with friends. This will be even more the case for the children of immigrants, for whom English will most likely become their dominant language. In many cases (discussed elsewhere in this paper) language shift will occur and English will become the sole language used.

There is a growing literature on how languages other than English have changed, and are changing, in Australia, e.g. Clyne's many writings (e.g. 1967, 1972, etc.) on German; Bettoni (1981) on Italian, Kouzmin (1976) on Russian, Schmidt (1985) on Dyirbal, Pauwels (1980) on Dutch and there is an extensive international literature on languages in contact, e.g. Weinreich (1953), Haugen (1953, 1956, 1973), Elwert (1959), Grosjean (1982), Taeschner (1982), Fantini (1985), Fthenakis *et al.* (1985), De Houwer (1988), to name but a few.

These studies reveal a more or less common pattern of development which takes place when an immigrant minority language comes into close contact with the majority language of the new country. Usually it is only the immigrant language which is affected by this contact, with the influence of the established majority language in most cases being negligible - perhaps an occasional lexical item is adopted, usually for a culturally specific concept for which the majority language has no existing term, e.g. Chinese *dim-sim* and Arabic *hommos* have now become part of Australian English. (It should be pointed out here that we are

here speaking of the influence of immigrant languages on the established majority language, e.g. English in Australia, as a whole, as being minor. The influence of an individual first generation immigrant's native language on the form of English he acquires and uses will be much more obvious.)

The influence of English on other languages spoken in Australia is much greater. I will now outline what forms this influence takes and discuss its implications for the maintenance of these languages in Australia. Most of the Australian literature on contact linguistics uses the terminology developed by Clyne (1967) in his book *Transference and Triggering: Observations on the Language Assimilation of Postwar German-Speaking Migrants in Australia*, and I will do likewise.

Traditionally, linguists, have referred to the influence of one language on another as "interference", which Weinreich (1953:1) defines as:

Those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language.

Since the word "interference" has negative connotations, Clyne (1967) prefers the more neutral term "transference" to refer to this phenomenon. It should be pointed out, before examples of transference are given, that there are no stable and uniform Australian varieties of these languages other than English (Clyne 1985:94). They are constantly changing, and the amount of transference (as will be discussed later) can vary from individual to individual. Some instances of transference may occur in the speech of many speakers of a particular language, whilst others may occur only in a particular individual's speech (i.e. in his/her idiolect). As Clyne (1985:94) says:

It could be said that there are as many varieties of "migrant languages" in Australia as there are speakers, since the nature and degree of English influence and general adaptation of the base language to the Australian context will largely depend on

the individual speaker's activities and life style as well as on his or her experience in both languages.

Lexical Transference

This is the transfer of words, in both form and meaning, from one language to another, and is probably the most common form of influence of English on languages other than English in Australia (Clyne 1985:95). Lexical transfers can be nouns, verbs, adjectives, adverbs, conjunctions, prepositions, interjections and even pronouns, although the majority of lexical transfers are nouns. (In her analysis of Italian in North Queensland, Bettoni (1981:93) found that about 70% of lexical transfers from English were nouns, a figure which is much the same as Haugen's (1950:224) established for English lexical transfers into American Norwegian and Swedish.)

There are a number of reasons for the occurrence of lexical transference. Perhaps the most common reason is a perceived or actual *vocabulary gap*. Immigrants are for instance, faced with a large number of Australian institutions, occupations, etc. which may not have an equivalent or no exact equivalent in their language, e.g. *plumber*. There, German speakers might use one of several possible German equivalents, e.g. *Klempner*. However, since the training of, and the work done by, a *Klempner* does not correspond exactly to that performed of an Australian *plumber*, they may prefer, for greater precision, to use the English word *plumber* in their German to refer to this occupation in the Australian context, and retain *Klempner* for the near equivalent occupation in Germany.

Often the lexical gap may be very real. One has only to consider the copious Australian flora and fauna to realise this. Most speakers of Italian, Greek, Serbo-Croatian, German, etc. will, for example, be aware of words in their languages for internationally known Australian flora and fauna: eucalyptus, kangaroo, koala. However, after that, terms are not well known

(e.g. for platypus, kookaburra), and many simply do not exist (e.g. flathead, morwong). Even purists, that is, persons who are very reluctant to use any English words at all in their other language, really have little alternative in many such cases but to use a lexical transfer from English. (In some cases, when an English term consists of early translatable parts, e.g. flathead, a direct translation may be resorted to: this is discussed below under semantic transference.)

Vocabulary gaps may also arise when a word is forgotten or cannot be called instantly to mind when it is needed. Speakers may then resort to circumlocution, just as any monolingual speakers do when they cannot recall a particular term ("one of those round rubber things..."). However, when speaking to fellow bilinguals and they can recall the term in English, they can use that word. There is considerable individual variation here with regard to attitude to such borrowing from English to fill these temporary lexical gaps. Even a speaker who freely does this, will usually make an effort to reduce lexical transference when speaking to someone who frowns on such a practice.

Similarly, vocabulary gaps may arise, perhaps even without the speaker (at first) becoming aware of it. Take, as an example, an Australian who speaks Italian at home, and who has trained and works as a computer programmer in this country. Unless he or she makes a particular effort, such as reading books and magazines in Italian or computer programming, she/he will not be able to talk about his/her job in much detail without having to use lexical transfers from English. Again, attitudes will vary, some speakers regarding this as more or less natural, others doing it apologetically and finding it somewhat embarrassing that it should be necessary.

Some lexical transference does take place which does not seem attributable to any of the above reasons, e.g. when a German speaker constantly uses the word library instead of German *Bibliothek* or *Bücherei*. Perhaps the word was once used as a result of a temporary lapse of memory and has become estab-

lished as part of his/her speech, or, more likely, the speaker is thinking of the name of a particular library with its English name, e.g. Minto Library, and the English word has greater saliency.

Of course, lexical transfers can also be used deliberately to create a certain effect, e.g. humour, irony, etc.

Young children growing up in contact with two languages may also at times acquire a word for a particular concept initially in only one language and assume that it is also the word in the other language, i.e. because the word has a pronunciation which could easily belong to either language they are seemingly unaware that they are using a word from the "wrong" language. If this is pointed out to them, they will eventually add the missing word and drop the lexical transfer, e.g. Saunders, (1988:184) reports how a 4 year old Australian German-English bilingual for quite some time used only *aber* (=but) in both languages.

Integration

A few words need to be said at this point about *integration* of lexical transfers. Speakers (or writers) who transfer words from English into their other language can decide on the extent to which they will integrate them into the semantic, grammatical phonological and graphemic systems of their language (Clyne 1985:97).

In other words, the lexical transfer can be made to appear or sound as if it belongs to the recipient language or it can be allowed to retain features which clearly mark it as English. Sometimes, lexical transfers which are not integrated will be preceded by a hesitation or even a short phrase such as "as they say in English". A typical example of a well integrated lexical transfer would be *la biccia* in Australian Italian, which has its origins in English *beach*. The word has been fully integrated into the phonological and grammatical system of Italian - it sounds, looks and acts like an Italian word. If such a word is used frequently enough by

enough people, its English origin will be forgotten. Children growing up in homes where lexical transfers are used by their parents will naturally acquire them without realising that they have been adopted from English. Only when they are confronted with monolingual speakers of the language back in the original country or who have recently arrived in Australia, do they become aware that particular words are not considered "genuine" Italian, German, etc.

Semantic transference

Clyne (1967) uses this term to refer to the transference of the *sense*, but not the word-form, of a word in one language to a cognate (a word in one language related in origin and meaning to one in the other), partial equivalent, or (near) homophone (a word sounding [nearly] the same in another language). The following are typical types of semantic transference to be found in languages other than English in Australia:

the literal translation of an idiom or compound (also called a "calque" or a "loan translation" in the literature), e.g. Australian Italian *donare il sacco a qualcuno*, 'to give someone the sack', is a literal translation of the English expression meaning 'dismiss'; in the Italian of Italy the expression could only be interpreted literally, i.e. 'to give the bag to someone'.

the transference of the meaning of a word in one language to a word in another which is sometimes an equivalent (also called a "loan meaning" or a "semantic extension"), e.g. in Saunders (1988:171) a German-English bilingual uses the word *platt* to refer to a flat battery (i.e. one drained of power), whereas the word *platt* corresponds to English 'flat' only in the sense "having a level, even surface". (German requires *leer* here, which in other contexts corresponds to English "empty".)

the transference of the meaning of a word in one language to a word form in the other language which sounds the same or similar but which is never an equivalent (often referred to in

traditional texts on foreign language teaching as "faux amis"), e.g. in Australian Italian many speakers use *fattoria* for the similar sounding English "factory"; however, in the Italian of Italy, *fattoria* means "farm", and the word for "factory" is *fabbrica*. (Australian Italian has neatly resolved any potential confusion by using the integrated lexical transfer *farma* for "farm".)

There are a number of possible reasons for the occurrence of semantic transfers in bilinguals' speech. Firstly, as in the case of lexical transfers, they may occur because of a vocabulary gap in one language. Saunders (1988:171), for instance, quotes an instance where a German-English bilingual child did not yet know the German term for a starfish (*Seestern*, literally "sea star") and referred to it as a *Sternfisch*, a literal translation of the English word; this was a way of not having to resort to using the English word in his German and the child had no way of knowing that the resulting word would not be the German term.

Semantic transfers are a common way that languages find vocabulary for new concepts which already have a name in another language. The English term "brain washing" is a typical example, being a literal translation of Chinese *hsi-nao*. Semantic transfers are less obvious than lexical transfers, even well integrated lexical transfers, since the word forms themselves are native elements of the language and thus tend to find much quicker acceptance by speakers.

Syntactic Transference

Clyne (1967:19) defines syntactic transference as "the taking over by one language of a sentence pattern or system of inflections of the other language".

Clyne's (1985:100) studies of German and Dutch in Australia show that English word order exerts a strong influence on these two Germanic languages, which share basically the same word order. Saunders (1988:166), in his study of three English-German bilingual Australian children, summarises the differences be-

tween German and English word order and shows the possibilities of transference between the two languages:

In a German statement sentence the verb occupies second position. This means that if the first word is not the subject, the subject then follows the verb, e.g.:

Frank (4;4,28): Vielleicht ist er verletzt. (Literally: Perhaps *is he* hurt.)

Clyne's (1985:100) reports that generalisation of Subject-Verb-Object accounts for 38.2% of incidences of syntactic transference of his German informants and 63% of his Dutch informants, with sentences such as following being common: *Jedes Jahr die Schafe werden geschert.* (=Every year the sheep are shorn.) (Standard German: *Jedes Jahr werden die Schafe geschoren.*)

Certain German conjunctions (such as *weil* [because], *wenn* [when, if], *damit* [so that], etc.) require the verb to be placed in the final position in a clause, e.g.:

Thomas (4;1,14) (looking at a life-buoy on a ship): Wenn jemand in der Wasser *fällt*, dann kommt ein Seemann raus und schmeißt das in die Wasser! (Literally: If someone in the water *falls*, then comes a sailor out and tosses that in the water!)

Certain German verbs (e.g. the so-called modal verbs such as *müssen* [must, have to], *können* [can, be able to], and *werden* [will] used to form the future tense) require a following infinitive to occupy the final position in the clause, e.g.:

Katrina (2;5,2): Ich kann der Hund nicht sehen. (Literally: I can the dog not see.)

German past participles come not after the auxiliary verb as in English, but at the end of the clause, e.g.:

Frank (7;5,1): Eine große Tigerschlange hat Peters Hund gebissen! (Literally: A big tiger snake has Peter's dog bitten!)

Clyne's (1985:100) studies of German and Dutch in Australia show that English word order exerts a strong influence on this aspect of these two Germanic languages, with discontinuous

constituents being brought closer together, as in the following Dutch utterance: "Ook hebben we haar geleerd Nederlandse versjes." (= Also we (have) taught her Dutch rhymes.) In Standard Dutch, *geleerd* (= taught) would come at the end.

Relative pronouns (who, which, that) cause the verb to occupy the final position in a clause, e.g.:

Thomas (4;3,23): Ein Dolmetscher hilft Leute, die nur eine Sprache sprechen. (Literally: An interpreter helps people *who* only one language *speak*.)

German has verbs which have a separable prefix which occupies the final position in the clause, e.g. aufwachen (=wake up):

Frank (5;5,22): Er wacht sehr früh auf. (Literally: He wakes very early up.)

The normal order of adverbs or adverbial expressions in a German sentence is time-manner-place, whereas in English adverbs of place usually take precedence, e.g.:

Katrina (5;9,16): Wir fliegen am 19. Dezember nach Tasmanien. (Literally: We fly on 19 December to Tasmania, cf. normal English: We're flying to Tasmania on 19 December.)

As can be seen, there is a great deal of scope for the influence of English on the syntax of these languages to make itself felt. The influence can be easily detected because the word order of these languages differs quite markedly from that of English. Languages such as the Romance languages, Italian, Spanish, French, Portuguese, have a word order which is much more similar to the Subject-Verb-Object order of English. However, there is one major difference, in that in the Romance languages adjectives normally follow nouns whereas in English they normally precede them. In his M.A. thesis entitled *Melbourne Spanish*, Kaminskis (1972:103) gives examples such as "la más vieja casa" (= the oldest house) for Standard Spanish "la casa más vieja". He also reports the use of the gerundive in Spanish instead of an infinitive or conjugated form of the verb, e.g. "Me gusta nadando.", clearly a

syntactic transfer from the English construction which does use a gerund: "I like swimming." (Standard Spanish requires "Me gusta nadar.") The gerund is also heard in Australian Italian in such constructions as "Fumando è pericoloso" (= Smoking is dangerous), where English does use a gerund but where Standard Italian requires the infinitive, thus: "Fumare è pericoloso."

Schmidt (1985:62, 230) finds that in young people's Dyirbal the traditional Dyirbal word order is rigidified on an subject-verb-object pattern as in English; the ergative distinction of traditional Dyirbal, which does not occur in English, is lost.

Morphological Transference

This type of transference occurs when a word in one language is modelled on the morphological pattern of another language. Clyne (1985:102) found transference of the English plural allomorph -s into the Dutch of some of his informants, e.g. *koeis* (= cows) instead of *koeien*. German speakers in Australia often follow the morphological pattern of English when forming adjectives from town names; in English the town name is simply used in unmodified form as an adjective, e.g. the Sydney Opera House, whereas in Standard German the proper name receives the ending -er, thus *das Sydneyer Opernhaus*. In Australian German, however, this often becomes *das Sydney Opernhaus*.

Generally, however, the tendency seems to be for there to be not all that much morphological transference from English, but rather for there to be some morphological confusion, particularly in the speech of child bilinguals (see Clyne 1985:102 for German, Kaminskas 1972 for Spanish, Endrody 1971 for Hungarian).

Pragmatic Transference

Australian English has a relatively casual system of address - among adults who know each other even only casually the use of first names is very common, and among workmates such usage

is virtually obligatory. Many children address adult friends of their parents by first names without this being considered impolite.

Most other languages spoken in Australia have a more complex system of address in which a distinction is made between close friends and relatives vis-à-vis acquaintances and strangers. Such a distinction is made not only in the form of address (e.g. Signor Scimone versus Ezio), but also needs to be marked linguistically by use of the appropriate second person pronoun and verb form. In German, for example, a somewhat simplified description of the address system is as follows: *du* is the word used for 'you' when addressing children, close friends, relatives, God, animals, whilst *Sie* is the formal form of 'you' used when addressing virtually everyone else; there is also a third form, *ihr*, which is basically the plural of *du*. In English, a speaker who is uncertain whether an interlocutor should be addressed by first name or not, can often postpone the decision indefinitely simply by avoiding using a name. This is possible because English has only the one pronoun of address, 'you'. In most other languages, this is not possible, since the decision has to extend to the pronoun to be used and the appropriate accompanying verb forms. Thus, the simple English sentence "Are you coming?" has three possible alternatives in German:

Kommst du? (e.g. to one close friend);

Kommt ihr? (e.g. to two friends);

Kommen Sie? (e.g. to an acquaintance).

It is difficult for the speaker of a community language in Australia to accept the informality of Australian English and at the same time retain the conventions of formality of the non-English language. This is particularly difficult if a person has to, because of circumstances, deal with the same people sometimes in English (e.g. in a workplace with a variety of nationalities where English is the *lingua franca*) and sometimes in the other language (e.g. in a club, at church). There is thus a much more widespread use of first names in ethnic groups in Australia than

would be the case in their countries of origin, since it is difficult, say, to call someone Hans in English (as Australian English rules of address would require) and then switch to Herr Schmidt when talking to the same person in German. There is a consequent much wider use of the informal pronoun of address (tu, du, etc.) in Australia than would be the case in the speakers' countries of origin. This is due both to the influence of the English system and perhaps also to as a mark of solidarity among fellow speakers of a language in an alien environment. Stoffel (1983) found that this was the case in a study of German speakers in New Zealand, a society very similar to that in Australia.

Second generation children in Australia who mainly use their language other than English in the home and with friends and relatives, are often not aware of the rules for using formal pronoun of address, since they have little, if any, practice in using it. When they come into contact with speakers of the language who expect the home country rules of address to be adhered to, communication conflict can arise, to the bewilderment and embarrassment of the second generation speaker. Saunders (1988:192) reports an example, where a German-speaking Australian teenager on a visit to Germany, used to using German only within her family, unwittingly uses informal du when addressing a post-office employee and is soundly reprimanded for her impudence.

Clyne (1985:105) reports on a pragmatic rule which has penetrated German discourse in Australia, namely the use of "Ja, danke" or even "Danke" based on Australian English "Yes, thank you" and "Thank you" as positive replies to an offer. In Germany, however, "Danke" is used as a *negative* reply, and "Ja, bitte" (= Yes, please) is required for a positive reply.

Pragmatic transference can also be non-verbal, as when Australian handshaking customs are transferred and used with a language in which handshaking would normally be much more frequent. Similarly, the Australian conventions regarding "personal space" etc. may be transferred.

Phonological Transference

Phonological transference (Clyne 1972:9) is the transference of a phoneme or an allophone (or absence thereof) from one language to another. In other words, a sound in one language is identified and pronounced like the closest available sound in another language. Phonological transference is perceptible in a person's speech as a non-native accent.

Usually, children who acquire a language before puberty do so with no or very few traces of a foreign accent. Penfield & Roberts (1956) and Lenneberg (1967) believe that there is a physiological reason for this: the brain of the child has a plasticity which is lost after puberty; the brain of an adult is rigid and set. Scovel (1969), after studying the available evidence, also concludes that it is the nature of the human brain which is involved here. This may not, however, be the reason, since it has been argued since, by Krashen (1973) and Schnitzer (1978), that cerebral lateralization is complete well before puberty, perhaps around age 5, or even earlier. Schnitzer believes that the critical period of language development may be related to other maturational factors. Only future research will reveal the answer, but whatever it is, all researchers agree that after puberty most people lose the ability to acquire the sound system of another language completely.

In view of this, phonological transference in the speech of immigrants who came to Australia after puberty is virtually in one direction, from the immigrant language to English, so that varying degrees of a foreign accent will be detectable in their English. Normally, English makes no impact on the pronunciation of the immigrant language of such immigrants (although Sussex (1980) does report that there can be some phonological transference present in the Polish of first generation speakers who have been in Australia for a relatively short time). In the case of children who arrived in Australia before puberty or who were born Australia and speak a language other than English at home, some influence of English phonology may be detected, although

such influence is generally minimal. Bettoni (1981:56), for instance, discovered some examples of phonological transference from English in the Italian of her North Queensland informants, e.g. the rolled *r* in words such as "parlare" was replaced by the Australian English fricative *r*. Similar findings have been made for German and Dutch (Clyne 1985:103) and Polish (Sussex 1980). Schmidt (1985:192) reports the presence of slight phonological transference from English present in young people's Dyirbal: the phonemic contrast between retroflex *r* and trill *rr* is beginning to break down in young people's Dyirbal, presumably because this rhotic contrast is not made in the speakers' dominant language, English.

Particularly in the speech of children born in Australia or who came here as children, words which happen to sound similar in English and the language other than English may be pronounced with English phonemes in the other language. Bettoni (1981) finds this in the speech of her informants, e.g. an Italian word such as "australiane" is pronounced by some informants with the initial sound as in Australian English. This writer has observed that English loanwords which are present in Standard German in Germany and which there are pronounced with pure German vowels, e.g. T-Shirt, Computer, tend to remain unintegrated in the speech of child bilinguals in Australia and retain the Australian diphthongs. Similarly, Schmidt (1985:190) reports that traditional speakers of Dyirbal phonologically integrate English lexical transfers, e.g. *dagida* (doctor), *barinaybul* (pineapple), whereas less proficient younger speakers of Dyirbal often retain the English pronunciation of such words in their Dyirbal.

Prosodic Transference

Prosodic transference is the influence of the intonation patterns of one language on another. Bettoni (1981:104) reports that English intonation affects the Italian of most of the childhood bilinguals she interviewed. The rising intonation applied to

sentences which are not questions requiring a yes or no answer, which is becoming more and more common in Australian English, was used frequently in the Italian of the childhood bilinguals. This intonation pattern, however, was not found in the speech of any of the adult bilinguals she interviewed.

Graphemic Transference

Graphemic transference is the transference of spelling conventions of one language to another. Many children growing up bilingually in Australia experience a big time lag between the acquisition of the spoken language and the written language. Indeed, many such children will regrettably grow into adulthood with minimal literacy in their home language, with the literacy skills they do acquire being confined mainly to reading. Those children who learn to write their home language will often do so after they have learnt to write in English, and they will in any case have much more practice in writing English, the language of most, if not all, of their schooling in the normal Australian school system. It is therefore probably inevitable that their will be some transference of the English spelling system for representing certain sound combinations when writing the other language. For example, the child learning to write German will be tempted to write SH to represent the same sound which in German is written SCH, to write IE instead of EI, since IE in English usually represents the sound in "tie" which is similar to the sound written EI in German (as in NEIN), etc.

The problem here is really one of insufficient practice in writing the non-English language. The more practice children could receive, the less graphemic transference would occur.

Transference in reception

The above description of the various types of transference from English to the other languages spoken in Australia may

convey the impression that transference is something which occurs only in speakers' production of a language. However, it should not be ignored that transference can also take place in reception, that is, in the way in which the listener interprets what s/he hears. The following typical example was witnessed by this writer during an Italian-English interpreting examination. A father said of his son: "Sia io che mia moglie facciamo di tutto per dargli una buona **educazione**, l'abbiamo anche messo in **collegio** per un paio d'anni, ma ..." The examination candidate, a second generation Australian of Italian parents, interpreted this as: "Both my wife and I do everything to give him a good **education**, and we also sent him to **college** for a couple of years, but ..." The problem here is that the father was using the words *educazione* and *collegio* in their Standard Italian sense of "upbringing" and "boarding school", whereas they were interpreted in their Australian Italian sense where they are semantic transfers from the closely related English "education" and "college".

Such incidents can obviously cause some consternation and confusion when Australian speakers of a particular language meet speakers of the language in, or newly arrived from, the language's country of origin, but probably no more than between two varieties of any language. For example, the speaker of Tasmanian English settling in Sydney has to come to grips with the fact that "dinner" which for him has always been the midday meal, is in Sydney called "lunch", and that for the speaker of Sydney English "dinner" refers to the evening meal. Or consider the bewilderment of an Australian at a meeting in the USA who suggests that a particular matter be tabled and is surprised when this is agreed to but the matter is not discussed. This Australian has forgotten that in American English "to table" means "to shelve", "to postpone", and not "to put forward for discussion" as in Australian English.

This also raises a matter which has been much discussed in Australia, particularly with regard to Italo-Australian (e.g. Bettoni 1985), namely attitudes towards Australian varieties of lan-

guages other than English. Traditionally, visitors from the various linguistic homelands to countries of immigration have looked down on and/or been amused by the variety of the language spoken by their countrymen abroad (Haugen 1953); the temptation is for such visitors to regard these migrant varieties as inferior corruptions of the language. Emotive and pejorative terms such as "barbarisms" are used to refer to the various forms of transference. Such attitudes may lead to a feeling of linguistic insecurity among speakers of the Australian varieties, particularly the second generation, when they need to communicate with standard speakers. Even among the Australian speakers of languages other than English there will be quite a spectrum of linguistic views, ranging from the quite normative speakers who strive to speak a variety indistinguishable from the standard in the language's homeland through to speakers who are very tolerant of any deviations from the standard as long as they can understand.

Even among those who consider that Australian varieties of languages other than English are valid means of communication in their own right, there is some unwillingness to allow developments to proceed to such an extent that the Australian varieties are no longer mutually intelligible with the varieties in the countries of origin. This is an important consideration when deciding on which forms of languages other than English should be taught to children in Australian schools. Most communities opt for the standard language as used in the country of origin. However, to avoid the dangers of creating a linguistic inferiority complex in young Australian speakers of the language, it would be advisable for there to be included in all courses a discussion of language change, with particular reference to ways the language has changed in Australia due to its contact with English and a totally new environment. Pupils could be made aware how common transfers used in Australia could be misunderstood or not understood in the linguistic homeland, without denigrating the children's own variety which they will have acquired pre-

dominantly from their parents in the home. Children are usually pleased to have such things pointed out, provided always, of course, that it is not done in a condescending way which implies that their own variety is inferior and wrong. They realize that English is their dominant language and that their other language is not of the same standard of development or accuracy. They are also aware that their other language is not of same standard as that of same-aged monolingual speakers of the language.

It is this writer's experience over many years of teaching young Australian German speakers at tertiary level that they wish to be able to speak a form of German which approaches that of the standard spoken in Germany. They do not wish a distance to become established between their speech and that of the linguistic homeland. They are pleased to learn, for example, how to talk about conservation, etc., without having to constantly use lexical transfers from English for more technical terms, to learn, to take but one example, that in German speaking countries "environmental impact statement" is called *Umweltverträglichkeitsuntersuchung*.

At times there have been calls for the teaching of the Australian variety of Italian in schools, but this writer agrees with Clyne, who writes in the foreword to Bettoni's (1981) study of Italian in North Queensland:

"If the North Queensland study is any indication, there are almost as many varieties of 'Australian Italian' as there are speakers, and the notion of a rapidly developing stable language (Andreoni 1980) which should be taught in schools, even instead of Standard Italian, cannot be justified."

Dialect

Many speakers of languages other than English in Australia speak dialects of these languages, but usually also have some proficiency in the standard variety. Many Italian immigrants, for

instance, are more at home in a regional dialect than in standard Italian, although radio and television (SBS), newspapers, etc. constantly expose them to standard Italian, and due to contacts with Italian immigrants from other dialect areas there is sometimes a need to produce at least an approximation of the standard variety, since intelligibility between two dialects can be difficult. First generation immigrants will probably have had at least some education in the standard language before migrating. Children growing up in Australian homes in which a dialect is spoken will in most cases also be exposed to the standard in much the same way as their parents (e.g. (radio, television, videos); if they are lucky, Italian will also be taught at their school, and this will be the standard language. When they use the standard language, there will most likely be transference from English and also from the dialect, e.g. Sicilian *picciliddi* (= children) may be transferred into Italian and used instead of Italian *bambini* (Rubino 1987:13). Rubino (1987:131) reports that in Australia the Italian dialects spoken are moving closer towards the standard language because of "the linguistic homogenization produced by migration, which has favoured frequent exchanges among Italians from different areas."

When teaching the standard variety of a language in Australian schools to children who speak a quite distinct dialect of it at home, teachers should regard the knowledge the children already possess as a useful stepping stone to the standard language, not a corrupt form of the standard variety. Often the dialect is a necessary component of the child's identity as part of his/her family and as part of the community which speaks that particular dialect.

Diglossia

Some immigrants in Australia come from countries with a linguistic situation known as **diglossia**, e.g. from the Arabic-speaking countries and from the German-speaking part of Swit-

zerland. In these countries, two distinct varieties of the same language, which are not necessarily mutually intelligible, are used by most of the population, with each variety being assigned certain functions. One variety, e.g. standard German in Switzerland, is known as the High variety and is used in the education system, in letter writing, in the media, literature, lectures, in church. The other variety, e.g. Swiss German, known in linguistics as the Low variety, is used in everyday conversation. It is generally considered inappropriate to use the High variety when the Low variety is called for, and vice versa. The child growing up in a family in Australia will acquire the Low variety from his parents, but outside the family English will fulfil the functions that the High variety fulfils in the linguistic homeland. Since the Low variety is not normally used for writing, the child will need to acquire the High variety to become literate in his/her parents' language. The High variety (as well as the Low variety) will also be needed if the child returns to his/her parents' homeland and is to function in a linguistically adequate way, e.g. Swiss German would be needed for everyday conversations, Standard German would be required for school or employment.

Code Switching

It is not unusual for a certain amount of code switching to take place in the speech of bilinguals when they are communicating with fellow bilinguals. Basically, code switching means the switching from one language (or variety of a language) to another for part of a sentence or conversation. Many outsiders see code switching as a sign of linguistic decay, the unsystematic result of not knowing at least one of the languages involved very well. A wide range of research into bilingualism indicates that the opposite is really the case (Appel & Muysken 1987:117). Poplack (1980) suggests, for instance, that only fully bilingual Puerto Ricans are capable of using both Spanish and English in one sentence.

Code switching may occur because of (a) extralinguistic

factors or (b) linguistic factors.

Extralinguistic factors

Firstly, there is the **interlocutor**, i.e. the person one is speaking to. Sometimes one of two possible languages becomes established as the normal means of communication between two people and a switch is made to this language whenever they converse. It is quite normal, for instance, in Australian families in which a language other than English is the usual means of communication between parents and children, for the children to switch to English as soon as they speak to each other. A speaker may also adapt his/her language to that of the conversation partner, so that a conversation begun in language A may switch to language B if a speaker feels that the addressee is more comfortable in that language. This can be a problem for language maintenance among second generation speakers of languages other than English, since competent adult bilinguals (usually from outside the family) may be tempted by any hesitancy or lack of fluency on the part of the second generation speakers to switch into English. Even the presence of someone who is not actually directly involved in a conversation may bring about a language switch, e.g. some speakers of languages other than English may continue a conversation in English when a monolingual English speaker enters the room.

Secondly, there is the **domain**, i.e. where the language is used. For many Australians, the home domain means a switch to a language other than English, whilst the work or school domain means a switch to English. In many cases, interlocutor and domain go hand in hand, i.e. the people one speaks to in different domains, e.g. home and school, are different and require different languages. However, sometimes one has to communicate with the same people in different domains. Some speakers switch to English in the public domain, e.g. in the street, in a train, to address the same people they would use another language with

in private. In an era of more tolerance of Australia's linguistic diversity, such switching is becoming less common.

Thirdly, there is **topic**. Certain topics may produce a switch from one language to the other because one or more of the interlocutors feels more able to discuss it in a particular language, e.g. a school child who speaks Vietnamese at home trying to tell about a chemistry experiment she has done at school that day may feel compelled, for lack of the necessary vocabulary, to switch completely into English, or at least partially, for key, seemingly untranslatable phrases.

Fourthly, there is **role relationship**. Clyne (1985:106) gives the example of a family friend with whom a child uses nothing but English in most situations, but whom the child addresses in the language other than English in the friend's role as an ethnic school teacher.

Linguistic factors

Stolt (1964) identified certain "linguistically neutral" words, that is, words which could belong to either language, which caused a speaker to lose his/her "linguistic orientation" and to continue he/her discourse in a different language from that in which he/she started. Clyne (1967) gave the name *trigger word* to this kind of word since it triggers a switch from one language to the other, a switch which the speakers themselves often, initially at least, are unaware of. The main types of triggerwords are *proper nouns* (e.g. Sydney), lexical transfers (e.g. "kookaburra" used in Australian German), *loanwords* (e.g. English words now part of Standard German etc., such as "T-Shirt"), and *homophonous diamorphs* (i.e. words having the same meaning and sounding the same or similar in both languages, e.g. German *Glas* and English *glass*). To these could be added (Saunders 1988:86) a quoted word or phrase from the other language which triggers a switch either in the speaker or in a listener, e.g.

Frank (5;6,26) (showing his mother, to whom he speaks

English, some German writing he has done for his father): Look what I wrote, Mum.

Mother: Gee. Can you write *Hund* ? (= dog)

Frank: Ja. (= Yes.)

Clyne (1967:84ff.) isolates four types of triggering: *consequential triggering* (i.e. following a trigger word), *anticipational triggering* (i.e. in anticipation of a trigger word), *sandwich words* (i.e. words "sandwiched" between two potential trigger words), and *contextual triggering* (i.e. triggering not because of a trigger word but because of the context of the situation). The trigger word setting off a language switch need not occur in the speaker's own speech but may be used by somebody else who is present (including voices on radio and television) (Saunders 1988:87). Examples of these are taken from Saunders's (1988) study of three Australian German-English bilingual children:

Consequential triggering:

Thomas (4;3,17): Der Ladenbrot ist nicht so gut wie Mamis bread, ah, Brot. (*The shop bread isn't as good as Mummy's bread, ah, bread.*)

The German word *Mami*, which is virtually identical in pronunciation with English *Mummy* has acted as the trigger word, leading to a brief switch to English.

Anticipational triggering:

This occurs when a speaker is thinking ahead to what s/he is about to say and, anticipating the imminent occurrence of a trigger word, switches from one language to the other just before reaching the word in question, e.g.:

Frank (3;6,7): Das war nett of Jim. (*That was nice of Jim.*)

Here, the name *Jim*, belonging as it does to both English and German functions as a trigger word and induces a switch to English just before it.

Sandwich words

This type of triggering is really a combination of consequential and anticipational triggering, e.g:

Thomas (7;6,23): Ich werde mir "Grange Hill" and "The Changes" ankucken. (*I'll watch "Grange Hill" and "The Changes".*)

Here, the word "and" is said in English because of the powerful effect of the two trigger words it is sandwiched between, namely the titles of two English film series. The speaker has been "unable to switch in and out of German quickly enough to avoid adapting the sandwich word to the two trigger words." (Clyne 1967:87).

Contextual triggering

This type of triggering is not brought about by a particular word or expression, but rather by the context of the situation. A certain activity or situation is closely associated with a particular language and this may trigger a switch to that language, e.g. Saunders (1988:89) has an example where a conversation about the German language coming before the following by a child's mother: "Do I speak good German then?" triggers a switch from English to German and he replies, "Ja." (Yes.)

Another reason for code switching is **quotational switching** (Saunders 1988:91). When monolingual speakers wish to quote directly what someone has said, they may reproduce the person's tone of voice, accent, dialect, choice of vocabulary and the like. Something of the original is injected into the quotation, and it is thus made to sound more credible. If this is not done, at least partially, then the quotation can sound out of place or even unauthentic. In communication between bilinguals, the decision as to how to quote is somewhat more complex, as often a choice has to be made between translating an utterance for the purpose of quotation or leaving it in its original language. According to Haugen (1953:65), reporting on Norwegian-English bilinguals in

the USA, Timm (1975:475), writing about American Spanish-English bilinguals, and Kouzmin (1976:108), discussing Russian-English bilingualism in Australia, the desire of bilingual speakers to quote in the original language is perhaps the main factor promoting language switching. Quotational switching usually occurs only when quoting *verbatim* (Saunders 1988:91); *indirect* speech (e.g. She said *that* ...) does not usually lead to a code switch. Wanting to quote someone in the original language seems to be motivated by one of three factors (in some cases by a combination of them): (i) a feeling of incongruity at quoting someone in a language he or she does not speak; (ii) a desire to capture the flavour of the original; (iii) to extricate oneself from a vocabulary difficulty. Sometimes quotational switching is preceded by a switching marker warning the listener that the other language is going to be used briefly and that the speaker is not really violating the usual language arrangement (Saunders 1988:93, Hasselmo 1970:198). Untranslatable jokes (or their punchlines) and puns necessitate quotational switching, as in the following example (Saunders 1988:95):

Thomas (9;5,26) (to father): Ich will dir ein' Witz auf englisch erzählen. (*I want to tell you a joke in English.*)

Father: Auf englisch? (*In English?*)

Thomas: Ich muß das auf englisch sagen, das wirkt nicht auf deutsch. (*I have to say it in English, it doesn't work in German.*)

Father: Okay. (*All right.*)

Thomas: Where did Napoleon keep his armies?

Father: Ooh - ich weiß nicht. (*Ooh - I don't know.*)

Thomas: In his sleeves.

In addition, bilinguals may find it very difficult to tell well-known stories, which they have only ever heard or told in one language, in the other language without resorting to some quotational switching (Hasselmo 1970, Saunders 1988).

BILINGUAL EDUCATION

Marta Rado

Preamble

Aims

The aim of the paper is to review critically the choices students, parents, teachers and administrators have in fostering dual language development, to provide guidelines and to make recommendations on policy options for the advancement of bilingualism.

Definition of Terms

For purposes of the paper key terms used are as follows.

1. A bilingual is an individual who can function in two language environments.
2. Bilingualism is to be understood as a high level of oracy and literacy competence in two languages, but not necessarily equal or near-equal competence.
3. The terms bilingual language development and dual language development are used interchangeably.
4. Bilingual learning/teaching involves the use of two languages as the medium of instruction.
5. Bilingual education provides both subject matter and language learning experiences in two languages.
6. Bilingual education subsumes bicultural education.

The Target Population

The paper focuses on the dual language development of non-Aboriginal Australians. The underlying principles are relevant to both Aboriginal and non-Aboriginal populations but the conditions under which such development occurs are different. Because of this and the existence of adequate documentation available for Aboriginal bilingual education (including ongoing reporting by means of newsletters e.g. NT Bilingual Education, published by Northern Territory Department of Education) Aboriginal bilingual education will not receive special attention here. However, reference will be made to the models developed for Aboriginal children where these are relevant to the discussion.

Encouragement of Bilingualism

The Learners

A significant number of Australians must *per force* be bilingual because their home language is not the dominant language, English. These students can be aptly called "social" bilinguals. In order to function effectively in both the private and public domains they must be competent in at least two languages. Others in the Australian community learn a Language Other Than English (LOTE) for professional, general educational and cultural reasons and for enjoyment. They can be referred to as "cultural" bilinguals. Their bilingualism is a matter of choice (Rado 1977a). Cultural bilinguals are often ignored in the bilingualism and bilingual education debate which tends to focus on language maintenance, in other words on the needs of ethnic minorities. The paper takes both types of bilinguals into account.

The cultural bilinguals, who are often learners with an English-speaking background (ESB), form a fairly homogeneous group and it is therefore relatively easy to design language teaching and/or bilingual education programs for them. The situation of

the social bilinguals, that is of those with a non-English-speaking background (NESB), is very different. Their competence in their home language and English language can range from limited oral comprehension to full oracy and literacy skills. This needs to be kept firmly in mind when designing programs for such students so that they can become competent bilinguals according to the terms of reference for this paper.

Ways of Developing Bilingual Competence

Bilingualism can be achieved by a combination of everyday language use and formal learning even if there is a significant imbalance between the two. For example children who are in a rich LOTE environment in the home sometimes attain high literacy skills by attending ethnic school classes once a week for a few years only. Others may become highly competent in a LOTE by receiving formal instruction for at least part of their postprimary schooling with limited opportunity to use the LOTE outside class. However, such individuals are the exception. In contrast, overseas and Australian research data show that the best way to ensure high competence in a LOTE is by means of bilingual education. To put it another way, learning *in a* language is superior in outcome to learning *a* language.

The Nature of Bilingualism

Language development is often identified with cognitive development. Although the two are closely related, they are not identical. What we know, that is semantic memory (see Cohen 1977), encompasses more than language. We process and express concepts and feelings through other means besides language, for example through sound and visual material. But undoubtedly language is the most efficient mode of communication at our disposal. As we learn new concepts, we look for the language forms to express them. In other words, primary language

acquisition (PLA) is under the control of cognitive development (Slobin 1973,1975,1985) which acts as a fine-tuned, efficient selection device as to what to learn, when, and how much. In second language acquisition (SLA) cognitive development no longer has such a strong directive function. Curiously, the problem for second language learners may well be that cognitively too much is available to them (Rado 1975). This is not the case if language acquisition is simultaneous in the bilingual's two languages.

Primary Language Acquisition versus Second Language Acquisition

At this point it might be profitable to reflect on the nature of PLA and SLA and the relationship between the two. The question whether the two acquisition processes are the same or not is much debated. Recent neurobiological research indicates that it may not be.

In the case of language acquisition...., the early exposure the early exposure the infant and child receive is primarily in the form of multidimensional sensory input. PLA intimately depends on the initial neuronal population and subsequent preservation; in other words, formational/organisational plasticity is involved in the earliest stages of language acquisition...

Unlike PLA which develops with the nervous system and is not only subject to but also responsible for maturational neural changes, SLA is essentially restricted to the integrational level of neural growth. In other words the second language must integrate itself into the existing neuronal framework... Because the postnatal brain cannot reproduce neurons, this could be accomplished by altering the existing substrate as well as by utilizing the same and/or different structures. Note that these "different" structures may have been used in PLA because, as the primary language becomes more automatic with continues use and refinement, smaller areas and more established structures become sufficient, thus freeing portions of the initial PLA cortical areas for involvement in SLA.... The ensuing prediction is that, once the stage is set by UG (universal grammar) and the connections formed with the acquisition of the primary language(s), the

second language will be successfully acquired to the extent that it can fit into the existing structure and/or form its own. The concept of integration appears to be supported by tentative evidence suggesting that the second language tends to be more diffusely represented in the brain than the primary language... It has even been suggested that exceptional SLA ability will be demonstrated by those with more of a bilateral, as opposed to the typical left, hemispheric organisation.

(Jacobs 1988:324)

What is significant here is that both PLA and SLA processes have neurobiological consequences. One is tempted to say that the bilingual brain is developmentally more complex than the monolingual. Because of the import of this opinion, Jacobs report on his research findings has been quoted at some length.

In the above quote, Jacobs recognizes that primary language acquisition can involve more than one language. In other words, he shares the view that in initial and continuing simultaneous language development the same powerful impetus human beings have to learn one language operates for learning two. The impetus of learning the mother tongue is part of human nature and can be compared with the spontaneous acquisition of learning to walk (Lenneberg 1967). What is distinctive about mother tongue learning, in a naturalistic setting, is that it is under the control of the learner's cognitive development, and consequently it cannot be accelerated. Whereas in a structured learning situation such as schooling provides, this is no longer the case (Rado 1975). Because of the greater cognitive maturity of students, SLA may be accelerated at any age (for example see Hansen-Bede 1975). One of the tasks therefore in designing any language teaching/learning syllabus is to match what is being taught in the form of concepts and structures with the cognitive and linguistic readiness, needs and interests of the students (see Pienemann 1983, 1984; Nicholas 1985; Rado and Reynolds 1988 a & b). LOTE language teaching guidelines currently being developed in Australia at the national level (ALL Project 1988) and at state

level (for example VCE LOTE Study Design 1988) take these considerations into account.

Optimum Starting Age for SLA

In the case where bilingualism is the product of sequential language learning, that is where initial language acquisition is monolingual and a second language is acquired some months or years later, an early start does not necessarily yield overall short-term superior results. In terms of the acquisition of grammatical structures it seems that older learners do better than younger children (see for example Ervin-Tripp 1974; Fathman 1975; Clyne 1986; Harley 1986), but not in terms of accent. However, in the long-term early starters do better in all aspects of language use. This is to be expected as, among other factors, their learning period is longer if they continue their language studies throughout schooling, an important fact to remember when planning the duration of language programs.

Approaches to Second Language Learning

There are four contexts for learning a language:

- 1) a naturalistic context in everyday life in the home
- 2) a naturalistic context in everyday life in the wider community
- 3) a structured language learning context
- 4) a structured subject matter learning context.

These contexts are not mutually exclusive. On the contrary they support each other and so greatly enhance the chances of superior language development. The contexts contribute to language development in different ways; for example, language use in the home tends to enhance oral conversational fluency, whereas language learning in an instructional setting tends to promote

literacy skills. Interlocutors associated with different contexts also play an important role. Initially parents are the most significant language models. Later, and in particular in adolescence, peers generally overshadow them (see Labov 1975). Lack of native speaker peer interaction is therefore a handicap (see Kipp 1986; Rado, Foster and Bradley 1986; Genesee 1987).

Monolingual ESB children in Australia learn English under the most favourable conditions, namely in four contexts. The question in planning for second language (L2) development is how to provide the contexts and to what degree. In other words the sum total of language learning contexts and their nature has to be taken into consideration in evaluating SLA or bilingual education policy options.

The likely combinations of everyday and instructional contexts are as follows.

Students from English speaking backgrounds (ESB) learning English at school: 4 contexts for English (i.e. home, wider community, learning English and learning subject matter in English)

Students from English speaking backgrounds learning a language other than English at school: 1 context for language other than English (i.e. learning the language other than English)

Students from English speaking backgrounds participating in a bilingual program: 2 contexts for language other than English (i.e. learning the language other than English and learning subject matter in the language other than English)

Students from non-English speaking backgrounds (NESB) learning a language other than English at home and at school: 2 contexts for language other than English with a possible weaker 3rd (i.e. home, learning the language other than English and perhaps interacting with the local ethnic community)

Students from non-English speaking backgrounds learning English at school: 3 contexts for English (i.e. wider

community, learning English and learning subject matter in English)

Students from non-English speaking backgrounds participating in a bilingual program: 3 contexts for language other than English with a possible weaker 4th (i.e. home, learning the language other than English, learning subject matter in the language other than English and perhaps interacting with the local ethnic community)

An examination of the contexts from the point of view of learning a LOTE reveals the following. For both groups bilingual education provides the greater number of contexts compared with learning LOTE as a subject. Further, one would expect that the NESB students would have an advantage because one of their contexts includes everyday language use whereas none of the ESB LOTE learning contexts do. This has implications for program planning and partly explains some outcomes of bilingual education.

The growing understanding of language learning conditions and processes are having an impact on language methodology. The ESL field is well developed and active. The LOTE teaching field is also progressive and broader in outlook as it is also concerned with the needs of the majority ESB students. The changes in LOTE pedagogy are described in some detail in recently published documents, such as the ALL Project 1988, the National Assessment Frameworks Project LOTE Framework P-10 1988 and the VCE LOTE Study Design 1988. In view of such rich documentation, language teaching methodology will not be discussed in detail in this paper. Suffice to say that if the proposed guidelines are followed (they are congruent across the documents), the LOTE learning outcomes with respect to all types of language use should be better. However, comparative competence with native speakers is not envisaged at any level. Even if serious attempts are made to simulate authentic language contexts and language use, it is unreasonable to expect that

language teaching can emulate the expanded and enriched language learning experiences bilingual education can offer. Consequently this paper focuses on the details of the bilingual learning approach such as allocating certain subject areas to one or the other or both languages involved for promoting bilingualism. This is the more important as most school communities are not acquainted with this method of achieving bilingual competence.

However, where relevant, language teaching *per se* as a route to bilingualism will be included in the discussion.

Characteristics of "Good" Bilingual Learners

Stern (1974) and his research group explored the topic of the "good" language learner, that is those who progressed well in learning another language, by means of student/teacher interviews, battery of personality tests and classroom observations. On the basis of these they have drawn up a list of positive strategies and personality traits.

Positive strategies:

1. A personal learning style or positive learning strategies;
2. An active approach to the learning task;
3. A tolerant and outgoing approach to the target language and its speakers;
4. Technical know-how about how to tackle a language;
5. A methodical flexible approach, developing the new language into an ordered system and constantly revising this system;
6. Constantly searching for meaning;
7. Willingness to practise;
8. Willingness to use the language in real communication;
9. Self-monitoring and critical sensitivity to language use;
10. Development of the L2 more and more as a separate

reference system and learning to think in it.

Personality traits:

- A. An element of insight and self-awareness;
- B. Frustration tolerance;
- C. A low anxiety level (self reliance);
- D. A high level of achievement and motivation (perfectionism, goal consciousness);
- E. A social (integrative) orientation;
- F. Task orientation (professionalism, technical know-how);
- G. Cognitive flexibility (adaptability, lack of rigidity).

An Australian study looked at the characteristics of competent and non-competent NESB bilingual learners irrespective of their language learning experiences. The "good" learners, that is those who achieved well in both languages were described as:

- . having an active interest in language, that is being linguistically aware
- . having a strong ethnic language family background
- . accepting their bilingualism positively
- . judging their language skills in the ethnic language as quite good
- . having a sympathetic orientation to the ethnic culture
- . matching parents' retention of ethnic identity to some degree
- . achieving well at school
- . demonstrating good study skills, motivation and study habits in the ethnic language and in English
- . having the ability process information in the ethnic language and in English
- . showing interest in reading bilingually, viewing films and TV in the ethnic language
- . being active in clubs and sport
- . favouring tertiary education and the higher professions

- . are well known by teachers
- . having intellectually oriented parents who think critically and judge living conditions in more abstract terms
- . having parents who are acquainted with the school

(Based on Foster, Rado and Lewis 1983: 228-229)

The inventories of strategies and characteristics are not intended to be exhaustive. Nevertheless, they could serve as a useful reference list when exploring ways of promoting bilingual learning.

Based Models of Bilingual Education

A useful way of categorising models of bilingual education is to look at the learners they are intended to serve. As mentioned earlier, these can be divided into two main groups, namely cultural bilinguals where bilingualism is a matter of choice and social circumstances. Cultural bilinguals usually commence schooling as monolinguals in the dominant language whereas social bilinguals may already know two languages or are monolingual in a minority language.

There are two main models serving cultural bilinguals (ESB), an "elite" and an "immersion" model. The models serving social bilinguals who are usually linguistics minority children are more numerous. Some rare models which are of limited interest in the Australian context will not be discussed in this paper, as, for example, a model which switches the language of instruction on alternate days (Tucker 1970).

A basic model for linguistic minorities (NESB) children is the "concurrent", "simultaneous" or "parallel" model which commences and continues instruction in two languages from the inception of schooling. This model is different from the concurrent model for cultural bilinguals (ESB) in that it uses local curriculum guidelines and does not expressly prepare students for other possible learning

contexts whereas elite bilingual education often does. Another basic model adopts a "sequential" approach by commencing schooling in the mother tongue and introducing structured instruction in the majority language some time later.

While these models have been developed overseas, they also have their local counterparts, albeit to the Australian situation. Both the overseas and Australian programs are fairly well documented (for example see Mackey 1971; Swain 1972; Cordasco 1976; Cohen 1979; Hayes 1980; Mills 1982; Ramirez 1985; Cahill 1984; Clyne 1986; Krashen and Biber 1988; Lo Bianco 1989). However, they do not cover all opportunities for children to become bilingual. In Australia in addition to the main models, we have after hours classes organised by the individual state educational authorities, insertion classes and ethnic schools. The latter are provided mainly for linguistic minority students indicating that the focus is on language maintenance. The monolingual child is in principle not excluded but as a rule does not participate.

It is important to point out that regrettably few of the models bring together the two types of learners, the cultural and social bilinguals.

Summary of Bilingual Education Rationales

The justifications for bilingual education range from educational to ethno-cultural and social justice and they incorporate some or all of the following considerations:

- literacy and other study skills;
- fulfilment of the individual's intellectual, social, emotional and career potential;
- 'Cultural mobilisation' of the whole society;
- inter-ethnic relations;
- international relations;
- geo-political and economic significance.

(See Rado 1977b: 125)

Kindergarten Bilingual Education

A child's first contact with a structured learning situation might be in a childcare centre or kindergarten although not all children have this experience. If they do, this is where formal schooling begins. Even if, as is customary, an informal approach is adopted, teachers of this age group consciously guide the children's language development through the daily activities they organise for them. With the help of bilingual staff, child care centres and kindergartens can significantly contribute to children's dual language development by providing activities in English and in the child's home language. Since fully qualified Bilingual teachers are rarely available, many kindergartens attended by linguistic minority children employ ethnic teacher aides.

Despite the importance of an early start in the development of bilingualism, relatively little attention has been paid to provision of readily available well documented guidelines for use in seminars/workshops and in in-and pre-service courses for teachers and teacher aides. However, there are some examples of how this can be done, such as publications of the Free Kindergarten Association Multicultural Resource Centre.

In Victoria and, as far as information was available, elsewhere in Australia, childcare centres and kindergartens are under no obligation to cater for the dual language needs of NESB children or to develop the ESB children's potential to benefit from learning a second language.

The model of bilingual education developed by the NT Education Department focuses at preschool level almost exclusively on the mother tongue, although the children are exposed to some oral English for a brief period each day. It must be remember that these programs are mostly implemented on settlements where the children rarely hear English.

One example of elite preschool bilingual education in Australia

are the classes run by the Bi-National Franco-Australian School of Canberra. This school is sponsored jointly by the French and Australian governments. It offers a K-10 bilingual program details of which will be discussed later.

Primary Bilingual Education

Bilingual primary education programs for social bilinguals generally initially allocate the greater proportion of instruction time to the language of the linguistic minority child. At times this is done independently of the child's competence in that language. (It must be noted that some children despite their minority language background are majority language dominant when entering school.) In such programs the two languages may gradually be given an equal share of instruction time. Subsequently this may be maintained or the majority may take over until by the end of primary schooling the ethnic language is taught as a school subject but is no longer used as the medium of instruction. In other words many bilingual programs are transitional with the aim of integrating children into mainstream schooling. Some bilingual programs in the UK such as the Welsh programs, are associated with language revival (see Baker 1988) and not language maintenance.

For the monolingual majority, Canadian educators and researchers developed an "Immersion" model whereby the dominant language speaking child, in this case the anglophone child is initially instructed in French, the minority language. Gradually instruction in English is phased in until a balance between the two languages is established. The aim is not, as in some elite programs, to leave open the options as to the language in which to continue education but the learning of French *per se*.

These two models overseas serve two distinct populations so that social and cultural bilinguals do not learn in a situation where they are in competition with each other.

Wherever these models have been applied in Australia, they

have been adapted to local conditions. The situation here is particularly complex because, except for Aboriginal communities there are no stable ethnic enclaves and the transitory enclaves that do exist are relatively small. Some of the variations can be illustrated by models developed in Victoria and described in the LOTE Framework P-10. The variants of the models in some cases offer shared learning experiences to social and cultural bilinguals in various ways. The need for this is much stressed, for example by German educators based on their experience with the children of immigrant workers (see Inter Nationes publication IN PRESS Education and Science Nr.9/10 (e), 1988).

Some Government Primary Schools Models Developed in Australia

1. Bilingual Mother-tongue Development

Initially the teaching is in LOTE with a limited amount of ESL instruction. Gradually instruction in English is increased until LOTE is only taught as a school subject. Example: Turkish program at Richmond West for children with a Turkish background.

2. Full Bilingual Program (for NESB learners with the same LOTE)

The program is organised as a vertically grouped minischool staffed by bilingual and monolingual teachers in a team teaching arrangement. At first, the greater proportion of instruction is in components are balanced. Examples: Lalor North for children with a Greek and Macedonian background.

3. Team and/or Pair-teaching

The monolingual and the bilingual teacher share the teaching of a lesson. Intermittently they sub-group the students in order to offer the opportunity to explain concepts, terminology and operations both in the LOTE and English to NESB children. Example: Abbotsford for children with a Chinese background.

4. Partial Bilingual Program (Immersion Bilingual Education)

Throughout, part of the curriculum is taught in the LOTE. In addition the LOTE is taught as a school subject. Both mother-tongue and second language learners can participate in the program. Example: Bayswater South for children with a German and non-German speaking background. The majority of children in this program are second language learners which is in accordance with the original intention of the designers of the model.

5. Organisation of Mother-tongue Learners

NESB and ESB students follow the same syllabus. The NESB group sharing the same LOTE are withdrawn by the LOTE teacher several times a week to explore the topic in hand in culture-specific ways. This can be done in any subject. Apparently this model has not been implemented.

(See LOTE Framework P-10 1988: 24-25)

A common feature of these models is that they are transitional. While sooner or later teaching in the ethnic language is phased out, but it is hoped that teaching the ethnic language will continue; however, this is not guaranteed. Differences between them mainly concern the full-time availability of a bilingual teacher and the intensity of interaction between bilingual teachers and students in the LOTE. The problem of staffing is a serious one, but it can be solved through pre-and in-service education provisions. The optimum, desirable and feasible type and duration of teacher student interaction in the LOTE cannot be determined out context. It should be placed on the bilingual education research agenda.

The Catholic educational system is also experimenting with bilingual education. Although Catholic schools are fairly autonomous they are influenced by educational consultants concerned with linguistic minority children. These consultants give advice on the choice of models. In Victoria an integrated simultaneous oracy and literacy program is favoured through from P-6. Classroom and bilingual teachers plan together making sure that they cover similar ground but in different ways so that

children can learn to express the same concepts in both languages without getting bored. Language and subject matter learning receive due attention but without being expressly timetabled in separate blocks.

Both the sequential and concurrent models are used in Aboriginal bilingual education. For children on settlements with little exposure to English, the Northern Territory Education Department has implemented the sequential model, whereas the Yipirinya Aboriginal School Council has chosen a concurrent bilingual/bicultural model in view of the fact that children living in Alice Springs are in constant contact with English. Some of the Aboriginal programs extend into the post-primary sector. One of the greatest obstacles here is the lack of teaching materials for languages without a written tradition.

Postprimary Bilingual Education

The literature on postprimary bilingual education is scant. In 1976 Cordasco reviewed over 70 programs in the US. Of these only half a dozen continued beyond primary school and only one was fully developed from K-12. In the same year Fishman published a world wide review reporting on the existence or absence of teaching in a second language in 117 countries, devoting one paragraph to each. The amount of time allocated to instruction in the second language varies from country to country according to the local context. Fishman (1976) gives four types of reasons for language choice in these programs:

1. maintenance of the home language e.g. the language of linguistic minorities in Europe;
2. learning a significant minority language which is not the mother-tongue e.g. French by non-francophones in Canada;
3. learning an important world language e.g. English in Germany
4. learning in two languages and thereby keeping the options

open to continue further study in either of them e.g. bilingual education in Europe and U.S. targeting cultural bilinguals.

Australian Postprimary Bilingual Education Models

In Australia the fourth type is represented by the Bi-National Franco-Australian School of Canberra whose program extends from K-10. The school is jointly staffed by the Australian and French governments. The curriculum is divided between the two languages and determined by the language of instruction using teaching materials designed for native speakers. Reid sets out the agreed objectives at the postprimary level of the school as follows:

- to provide bilingual education in English and French from K-10;
- to promote progressive bilingualism;
- to foster respect for other cultures;
- to provide normal high quality secondary schooling;
- to contribute to French-Australian relations

(Reid 1988:12)

This elite school is similar to others sponsored by the French government throughout the world. The success of their high scholastic expectations is confirmed by Reid. Such schools partly serve the needs of students whose parents are geographically mobile because of their jobs, for example with the diplomatic service or with multinational companies.

A rare example of a bilingual school which pursues the dual aims of language maintenance and academic excellence is St John's Greek Orthodox college in Melbourne. The school has a strongly religious orientation. It has a bilingual program through from P-12. Initially instruction time is equally divided between English and Greek. From years 4-12 Greek and English and religion in Greek only.

Besides programs in schools with a strong academic and/or religious bias, programs primarily aimed at language maintenance can also be found in Australia. In Victoria a handful of government schools have offered, or still offer such programs, for example Preston Girls' HS, and Collingwood Education Centre. Programs mainly targetting the ESB student also exist, for example Bayswater HS.

The programs that have been developed have focused on a particular subject area such as social studies or science at the junior level for mother tongue speakers. Mounting such programs usually involved appointing additional staff capable of teaching subject matter in a LOTE and developing materials for such courses. These programs were considered a success on the basis of normal classroom tests and feedback from participants, namely students, teachers and parents. Nevertheless, some programs had to be discontinued subsequently because of lack of funding.

Conceptually, postprimary bilingual programs seem deceptively straightforward if they are viewed as simply changing the language of instruction without taking into account the pedagogical implications different cultural connotations may have. The extra time teachers require may be due to the joint preparation with colleagues teaching the same subject to English medium classes. This is a type of team teaching that takes place outside the classroom.

Team teaching can also occur within the classroom in that two teachers can instruct in turn using bilingual texts. There is one such model operative in Melbourne. The subject area chosen is social studies. It is a compulsory bilingual program for Year 7 offered in Arabic, Greek, Italian and Turkish. If students do not belong to any of these language groups they receive special tuition in Italian and join that program. This approach seems to have more of a cross-cultural than language in close succession may increase the likelihood of crosslinguistic interference. Further, the program is expensive in terms of staffing. It doubles the number of teachers required for class contact time, and in

addition time must be allotted for joint lesson planning.

Curiously none of these programs, at least in Victoria, cater for recent arrivals such as the Vietnamese adolescents whose need to continue their cognitive development (on par with their maturity) rivals the need to learn English (see Rado 1977b; Rado, Foster and Bradley 1986; Rado and Oldfield 1987).

The models mentioned so far are teacher centred. To satisfy the needs of new arrivals and members of smaller language groups, but also interested learners generally, a student-centred bilingual learning approach has been developed in the form of the Multilingual Project. The project has produced bilingual materials in over a dozen community languages in the 1970s and early 1980s. These are still in use in some schools. The project has demonstrated the viability of the approach. It has also documented the satisfaction of participants with small-group (Foster, Rado and Rowley 1980).

Timing and Duration of Bilingual Education Programs

One of the questions that needs further investigation is the timing and duration of bilingual programs. For example, should one limit bilingual education to the primary sector and rely for development of bilingualism on teaching the relevant LOTE at the postprimary level. The arguments for focusing on the primary sector are, first, that it is easier to staff because primary teachers certification as LOTE/bilingual education teachers can be a relatively easy procedure. Victoria already has a mechanism for the accreditation of community language teachers which could serve as a model for accrediting bilingual teachers at this level. Second, it is easier to develop a bilingual education curriculum in an already integrated program of the primary type. Third, at this age children are more receptive and flexible with respect to experimenting with language so that this is a good time for laying down the foundations of dual language development.

Other arguments have been advanced for extending LOTE/ bilingual education programs to the postprimary sector. Cazden et al. (1975) have found that pre-adolescents around the age of 11 are the best language learners master grammatical markers faster than younger learners. On the other hand younger learners are more likely to acquire a native-like accent and fluency.

Since L2 learning is less closely tied to cognitive development and so can be accelerated, entry into bilingual education should be possible at postprimary level if preceded by a period of intensive language teaching/learning. However this is not a recommended procedure; even if accelerated, language development, as stressed by Cummins and Swain (1986), takes time. If the seven-year period is taken as the norm for developing academic language then bilingual education should span the whole primary schooling period. Continuation of the program at the postprimary level can be strongly recommended on the grounds that reducing language learning to a single context at school, namely to studying language as a subject, is to drastically reduce its vitality. This could easily generate boredom and lead to development of negative attitudes vis-a-vis language learning.

Undoubtedly bilingual education is difficult and costly to implement at postprimary levels. Prospective tertiary students, develop adequate language skills to teach a LOTE as well as another subject area in the LOTE. In this way programs can be more easily economically staffed without creating industrial problems. There are also problems of timetabling, curriculum development and teaching resources, but these too can be solved. The crucial question is can language learning *per se* replace the effectiveness of learning *in a* language. In fact language teaching methodology today is moving in a direction that pays much attention to *what* is learnt as well as to *how* it is expressed. Moreover, since language development is tied to language use in context, the broader and more varied the contexts the better this will be for language learning.

Bilingualism as a Necessity

Bilingualism is a necessity for those students who are LOTE dominant when they enter school. If they are of pre-school age, it is predictable that by the end of Year 6 they will be English dominant. In other words they will have experienced language shift from L1 to L2 during a most sensitive period of cognitive and language development. There is no guarantee that in the course of this shift some verbal labels for existing concepts will not be lost in L1 before they are acquired in L2. Conversely much that has been acquired in L2 may not be available in L1 (see Foster, Rado and Lewis 1983). Such disruption in language development can be avoided by means of bilingual education.

At the postprimary level where mastery of the process and the product of learning has such serious career implications students cannot afford to stop learning because they do not know English well enough to participate in normal classroom instruction. Bilingual education allows them to study subject matter at their own intellectual level and also helps them to accelerate the acquisition of English. To sum up, for LOTE dominant students bilingual education is indispensable if they are to realise their intellectual and linguistic potential and so become superior bilinguals.

Other Provisions for Developing Bilingualism

In the process of fostering bilingualism, other ways of teaching languages have been developed in Australia besides those offered by systemic schools. This may be due to lack of interest by systemic providers but also the impossibility of catering for the language needs of so many different types of mother-tongue speakers. To satisfy this need state education authorities have established after hours language classes which offer tuition in a range of languages for a few hours a week. In principle they are offered first to mother-tongue speakers. One of their attractions

is that they offer students the opportunity to meet and make friends with peers belonging to the same language group.

Similarly, ethnic schools at times also offer an emotionally supportive environment (Foster, Rado and Lewis 1983) but this is not their main objective. According to Norst they fulfil a real need in that they allow parents to exercise behalf of their children "The Right to Instruction in the Standard Language Associated with the Family and Ethnic Community in Australia" (1982:203).

What speaks for these schools is that they are community based; what speaks against them is that they appear to be inward looking. However, this may be changing and, furthermore, teaching the community language to those not of the community is also seen as desirable. This impression was reinforced by the SBS documentary on Ethnic Schools in the 1989 Australian Mosaic Series. Although ethnic school organisers have expressed the wish for better relations with the other education systems, there is as yet little communication between ethnic and mainstream schools. Norst (1982:208) itemises how this could be changed. One strategy put into effect in Victoria is the establishment of an Ethnic Schools Resource Centre. The newsletter Mosaic published by the centre shows its multiple functions in providing teachers with support, including the dissemination of information on national and state services such as Multicultural Education Resources Centres.

The greatest problem ethnic schools face is that they are often staffed by teachers whose qualifications have not been recognised and whose teaching methodology may be at times outdated. They are also criticised for tending to place too much emphasis on historico-cultural or religious matters to the detriment of language learning. In favour of ethnic schools is that, first, without them we would have fewer bilinguals in our society and therefore a less linguistically skilled workforce. Second, without them we could not satisfy the language needs of our smaller linguistic minority groups. This has been recognised by the Commonwealth Government, which since 1981 has instituted a funding scheme

for these schools. (For possible policy options see MACMME Ethnic Schools in Victoria).

The Commonwealth also funds insertion classes to be found usually in primary schools. They are offered as an elective in addition to the general school curriculum with often little attention paid to integration. This may be difficult because they tend to be taught by itinerant teachers with little contact with the rest of the staff. These classes have been criticised for promoting language awareness and not language competence (Harris 1984). Because, from the language learning point of view, their surrender value seems to be negligible they will not be included in further discussion.

Although there are no spectacular changes since Mills' (1982) report on bilingual education and LOTE teaching in Australia, there is reason to believe that more will be happening in future. IN the wake of the National Policy on Languages most state education authorities are now developing firm policy options for LOTE learning. (For example see South Australian Education Department Languages Other Than English Development Plan 1987-95 (Draft); Languages for Western Australians 1988; lo Bianco's Languages Action Plan 1989 for Victoria).

Attainable levels of bilingual competence

Advantages of Bilingualism

Elite schools for cultural bilinguals are not under pressure to prove themselves. Some, like the Lycée Français de New York, build on a long tradition. They mean their success in terms of their aims, namely to enable students to continue their education in either language, for example at MIT or the Sorbonne. In case of these schools all that is required of them is to monitor the progress of their ex-students.

In contrast of these schools, publicly funded bilingual programs are under pressure to be evaluated. The evaluation has a theoretical as well as a pedagogical aspect. What is evaluated and the manner of evaluation is strongly influenced by the aims of the program, the types of students enrolled and the lingering suspicion that bilingualism has detrimental effect on language development and intelligence. Baker's (1988) summary of the relevant research shows that his belief, originated in the 19th century, was prevalent until the 1960s among researchers. He concludes that "much of the research into early bilingualism and IQ is invalid by present standards because of deficiencies in testing, experimental design, statistical analysis and sampling" (1988:12). But fears of these disadvantages persist among the members of the general public overseas and locally, often even among senior educators. It is thought that bilingualism may result in

- . two half-developed languages
- . lower IQ
- . lower overall performance at school.

The first major opposition to such negative views came from Peal and Lambert (1962) whose research showed a positive relationship of IQ to bilingualism. Their original list of the advantages of bilingualism has since been expanded. There is some further research evidence that bilinguals have advantages over comparable monolinguals in the following areas:

- . concept formation
- . general reasoning
- . divergent and creative thinking
- . analytic orientation to language
- . linguistic awareness
- . categorisation skills
- . communication sensitivity

cognitive style of field independence

(cf Baker 1988: 22-36 and Rado 1984: 60-69).

The advantages listed above tend to be more relevant for younger than older learners because most research in this area focuses on preschool children and children in the early years of primary school. For example, linguistic awareness is necessary for acquiring literacy skills and that bilingual children develop such awareness earlier than their monolingual peers (Tunmer and Bowey 1980; Tunmer, Pratt and Herriman 1983; Veljeskov 1988). In fact much of the documentation we have is designed to identify the benefits of early bilingualism and is not concerned with evaluating the effectiveness of different programs. Of course information on the corollaries of bilingualism should be of interest to educators and parents.

The benefits of bilingualism for postprimary learners is less well documented. Those in favour of dual language development, whether students, parents or teachers, see its benefits in cognitive, affective, social and career terms. These are often naively expressed. For example "The more languages you know the better". "You can communicate with other people". "It's good for a job". "You can talk with different people". "I love the language, it's beautiful". "Not to forget your language". "You have two cultures which you can compare". "Better in the future to have two languages instead of one". "You can probably find easier job". (Foster, Rado and Lewis 1983:97-125).

For adults learners, particularly for those studying at a tertiary institutions, the employment opportunities, that is the practical benefits of bilingualism, have been documented in some detail by Borland, George and Rado (1989).

The more recent school evaluations available focus on language development and school achievement in non-language arts subjects. Although less flawed than earlier studies, many still have methodological limitations and deficiencies. One of the difficulties of the research methodology is to separate competent

from non-competent bilinguals. In the light of the threshold/interdependence theory such a distinction is essential. The theory holds that students cannot learn effectively in their first language (L1) or second language (L2) unless they have developed their L1 to a degree that enables them to pursue "academic", in other words school studies (Skutnabb-Kangas and Toukomaa 1976; Skutnabb-Kangas 1980; Cummins 1978, 1979). Further Cummins (1984) holds that it takes six to seven years to develop an academic language. (Also see Cummins and Swain 1986).

Types of Evaluation Data

The available bilingual education evaluation reports focus on linguistic and cognitive gains although other outcomes such as attitude and motivation are also discussed. The studies are often designed to justify bilingual education and should therefore be a useful source of information for administrators, teachers and parents but they tend to be too technical for this audience. Reporting consistently on the outcome of programs is difficult because of differences in evaluation design due to different school populations and program objectives. For example some projects use majority children as control groups, others use the same type of linguistic minority children who are not in a bilingual education program. Sometimes both types of comparisons are made.

Measuring Bilingual Achievement

As Baker (1988) points out bilingual education is not a major area in educational research in the U.K. despite its sizeable NESB immigrant population. The indigenous Celtic languages are an exception. Particularly in Wales, as part of the Welsh language revival movement, bilingual education is receiving much attention and is carefully monitored. Most of the programs in infant and junior classes were set up in anglicised areas of Wales for children who did not speak the language, offering them partial immersion

bilingual education. This approach seems to be successful. The children did not fall behind in English and maths attainment and gained communicative competency in a second language. "Understanding Welsh and speaking Welsh were generally well established by seven years of age, with further progress and consolidation over the next few years" (Baker 1988:76). This conclusion was reached on the basis of oral language and listening and reading comprehension tests. These results point once again to the need allow time dual language development. Further, the testing suggests that in this type of immersion program there is a disproportionately strong emphasis on receptive skills compared with productive skills which is a matter of concern.

Bilingual education in the U.S serves various linguistic minorities such as the American Indian, Chinese and Hispanic populations. One recent report on six Spanish-English bilingual programs in California (Krashen and Biber 1988) documents the potential of sequential programs for limited English proficiency students. These are the programs that introduce literacy skills and new concepts in the mother tongue first, with instruction in L2 to follow later. Results indicate that children in a bilingual program can make normal progress in their general school subjects such as science and social studies. For example, results of standardised testing in maths showed that the students performed at or above national grade level norms. Further, students typically reached grade level conversational English in about two years and academic English in three to six years.

As was mentioned earlier Cummins argues (1984 and elsewhere) that the difference in educational terms between conversational language (which is cognitively demanding and context reducing) is crucial. Indeed the time it takes to acquire academic language is of central interest to this discussion and will taken up again. The favourable findings of Biber and Krashen are supported by other studies such as those of Willig (cited by Baker 1988:88) who analyse 23 bilingual education studies. Baker also discusses a world-wide review published in

1983 by Baker and de Kanter. From among 300 evaluation studies, 39 were selected by these researchers for examination according to preset criteria. The findings were inconclusive in that they did not reveal any consistent positive or negative trends with respect to children's linguistic and scholastic progress. Baker blames the narrow line of inquiry adopted by the researchers for this.

A well researched and well publicised model of bilingual education is the Canadian French-English full-immersion program for anglophone children. (The Bayswater South partial bilingual program in Victoria is a variant of this model; one significant difference is that in the Bayswater program, both mother tongue and second language speakers can participate). The evaluation data indicate that the Canadian programs have the potential to develop a considerable degree of bilingualism among majority children from monolingual homes while having no long term detrimental effects on cognitive growth, first language skills or academic achievement. In these programs, as stated by Cummins, it takes the children about seven years to achieve academic communicative competence in their second language. But they speak with an accent and generally their French language skills are less well developed than those of their native speakers peers. This is understandable since they have no opportunity to interact with francophone peers. They are taught in homogeneous classes of English speakers to avoid unfair competition from native speakers. In this situation the language of instruction can be adjusted to the students' linguistic competence.

The favourable findings of the Canadian immersion programs are the results of batteries of test administered over a number of years. These consisted of nonverbal cognitive abilities tests, basic skills tests including English and maths, science achievement tests, and various French language receptive and productive skills tests (for example see Swain and Lapkin 1982; Cummins and Swair 1986).

Measuring Bilingual Achievement: Australian Data

In Australia the German Partial Immersion Programs for mother tongue and second language learners are also well documented. Bayswater South has the fuller program devoting four half hours to teaching subject content and language arts in German whereas Bayswater West only allocates two half hours to learning German and in German. There is a third program at Syndal North Primary School where children learn German only. These children were used as a control group (Clyne 1986b).

With respect to cognitive skill development, the study sought to answer the following questions

1. Are children able to transfer concepts, knowledge and skills learnt exclusively through the medium of L2 into L1 without being retaught?
2. Are the ability levels in terms of concepts, knowledge and skills, of children in the bilingual program comparable with monolingual peers?
3. Have children in the bilingual program acquired the specialized language and terminology required in Science in both L2 and L1?

(Eckstein 1986: 85)

The test indicates that the answer to these questions is positive. The bilingual children did as well or better than their monolingual peers. The more exposure to German the better the results. So the Bayswater South children were the most proficient and the Syndal North children the least (Eckstein 1986).

With respect to language skills some interesting results emerge. In reporting on these findings Clyne has postulated four phases in the development of the children's oral discourse from English to German. The phases may be indicative of language development in a school setting and are therefore quoted in full.

1. 1- or 2- word German sentences, unanalyzed and formulaic responses or no (German) answer at all.

2. The matrix language of the discourse (usually characterised by the language of the verbs) is English, but individual German items (nouns, noun phrases or uninflected adjectives) are transferred, with occasional code switching.
3. An attempt to speak German, with frequent code-switching to German within sentences, as well as patterns to integrate English words into German.
4. The matrix language of the discourse is clearly German, but occasionally English words are transferred, and sometimes integrated into the German phonological and/or grammatical system similar to the behaviour of German speaking migrants in Australia....

(Clyne 1986c: 58)

The rapid language developers reached this phase late in the third year.

The children in the Bayswater South program had difficulty with literacy skills, although in the long term they did reasonably well. By the fifth year of the program their German reading was almost faultless as regards both fluency and pronunciation. But they continued to have problems with writing. The data support the view that initial literacy should be taught in the dominant language. However not all researchers approve of this approach. For example Edelsky (1986) argues that knowledge necessary for literacy skills acquired in one language is transferable to another. According to this view, bilingual children when writing cause two sources of useful information. So writing in the second language need not be delayed. Clearly this is a question for the research agenda.

The Bayswater evaluation of English language skills also favours the immersion program in that there were no significant negative effects.

In South Australia, two experiments with Italian bilingual education in the lower grades of primary school have been evaluated (Rubichi n.d.). Children in these transitional programs were tested to assess various aspects of their academic ability and

dual language skills such as maths, reading and spelling. Rubichi reports

In general, they displayed a linguistic and communicative competence in Italian which is rarely found in our secondary schools, probably due also to the more spontaneous, less inhibited speech behaviour which characterises primary school children

(Rubichi n.d. :88)

Nevertheless, these children had difficulties with Italian vocabulary and grammar. They also had problems with English.

The Italian-Australian children in the bilingual programs whose English language acquisition process has started within their family showed similar language characteristics which were lexically, syntactically and phonologically different from those typical of children from Anglo-Australian homes

(Rubichi n.d. : 89-90).

Rubichi argues that giving standardised ability tests to students with different patterns of language use is discriminatory. He adds "that teaching in a bilingual program is fraught with problems over and above those experienced by regular teachers". If one takes this account, according to Rubichi, even moderately satisfactory test results are commendable. He believes that much can be learnt from these early attempts to implement bilingual education.

In contrast to bilingual education, Wiseman (1985) has evaluated Italian language teaching programs in the South Australian primary schools. On the basis of his descriptive evaluation he comes to the following conclusion

It appeared that for no student was Italian a preferred language nor one in which competence was anywhere near that in English. If ever there was a choice, students chose English

(1985:116)

Wiseman states that this conclusion "is not intended to be a gloomy denial that anything was being or had been learnt". What is implied here is that more could have been learnt. In that way, it can serve as a reminder that bilingual education might be more successful method than second language teaching for fostering communicative competence in children.

For other Australian bilingual programs, test-based data are not easily available but there are impressionistic data in the form of responses given to interview questions and comments collected by other means. For example, experienced English teachers in the schools hosting bilingual programs judged the children to be confident and fluent in expressing themselves in English, they showed a rapid advance to normal levels in English classes. In one school 94 per cent of parents judged the children's progress in the LOTE as very satisfactory/satisfactory (Cahill 1984). Further, teachers not involved in the programs and principals affirmed that the children's subject matter knowledge has not suffered and that they showed positive gains in general language ability.

One important finding of the program evaluation literature is that benefits of bilingual education do not become fully evident in the short term. The Canadian immersion data support Cummins' contention mentioned earlier that it takes six to seven years to develop academic language. Testing in the early years revealed native-like proficiency in listening comprehension but not in reading and writing. Test results in the German immersion program in Melbourne also reveal difficulties with literacy. Reading skills to an acceptable level are somewhat delayed but do not really cause a problem. On the other hand the mastery of writing skills seems to be difficult for children in immersion programs. This may be attributable to the nature of language learning and the nature and number of learning contexts in which it occurs, a matter that deserves attention from researchers.

In sum, it can be said that where bilingual education was offered, even in a very limited form as in the ACT (Reid 1988), members of the school community almost without exception

expressed satisfaction with these programs. Yet, as the South Australian experience demonstrates, there is no room for complacency. Bilingual education needs a comprehensive program from P-12, careful preparation, adequate materials and experienced teachers. A successful school like St John's College in Melbourne seems to testify to this. Over 90 per cent of the students reach a standard in English and other subject areas which enables them to go on to university. Their high achievement in English is rivalled or even their proficiency in Greek.

At a time when mainstreaming of exceptional or handicapped children is the preferred option, the question of including these children in bilingual programs must be addressed. It can be argued that children in bilingual programs must be addressed. It can be argued that children from linguistic minority homes need support for mother tongue tuition for the same reasons as other children. Clearly, programs have to be adjusted to the cognitive and linguistic abilities of handicapped children (Baca and Cervantes 1984). Research findings support this view. Bruck found that language-disabled students in an immersion program developed "linguistic, cognitive and academic skills at a rate similar to that which they would develop were they placed in an all English classroom" (1978:65). One can add that they had the additional benefit of developing dual language skills.

Primary versus Postprimary Bilingual Education

As pointed out earlier the initiative for establishing bilingual programs is focused on the primary level. It seems logical to begin there and assume that the postprimary sector, where LOTE is traditionally taught, will ensure the students' continued LOTE development. There are in fact some signs that postprimary schools are beginning to liaise with their feeder schools. Strategies as to how to accommodate the language demands of prospective students from these schools are being explored, for example by the Victorian Ministry of Education by encouraging schools to

form clusters around a "hub" or "magnet" postprimary school offering a range of languages (lo Bianco 1989: 73).

In the light of the language proficiency outcomes of bilingual primary education, be it English or LOTE, a discussion of the relative merit of primary and postprimary bilingual education is in order. Reading the evaluation literature, reinforced by personal observation, leads to the impression that students need to continue to learn bilingually if their oral and written productive skills are in any way to approximate their quite considerable receptive skills. Discontinuing bilingual education which fosters language as well as conversational skills is wasteful because of the likelihood that the academic language learnt will be arrested, if not forgotten at the pre-adolescent level. Yet we know that native speakers do not reach linguistic maturity before adulthood (Labov 1975). In case of bilinguals they will not become adult speakers in the language if they do not continue to develop it through learning. In our society "the requirement of skilled, proficient use of spoken and written language are becoming ever greater" (lo Bianco 1989:13). This is not an elitist view but one of the fundamental aims of our education system. If bilingualism is to yield tangible benefits continuing bilingual education is an imperative. It is the only method of language teaching which can ensure superior dual language skills with reasonable certainty. As a case in point, consider St John's College which consistently maintains a bilingual program throughout the primary and postprimary sectors.

Non-academic Outcomes

A complete evaluation of bilingual education programs includes studying a variety of other factors besides academic and linguistic achievement. These include the attitude and motivation of the entire school community. Gardner and Lambert (1972) were among the first to draw attention to the important role attitudes and motivation play in successful L2 development. Conveniently Baker (1988) gives a brief overview of available measurement

techniques in this area.

Both overseas and local evaluation studies have paid attention to attitudinal and motivation factors. They rely heavily on participants self reports gathered by means of interviews and questionnaires, but other techniques including observation and meetings have also been used.

Here evidence in support of bilingual education takes various forms. The results are mixed. Reservations and negative judgements are usually expressed by those who are not directly involved in the program, for example other teachers who are often uninformed about program details. The evidence to be reviewed here represents majority views. It is based on a range of overseas and local studies. The references used for illustrative purposes are typical examples. They are not intended to be exhaustive.

The School Community's Perceptions

Several studies (e.g. Cohen 1979, Cahill 1984, Imberger 1987; Rubichi n.d) report:

- . Overall satisfaction of School Council members, principals, teachers involved in the program, other staff and parents who state that in their perception the children are doing well
- . greater use of the LOTE by children
- . greater use of the LOTE by parents
- . better school attendance and attitude toward school
- . greater value placed on ethnic culture by parents
- . the sharing of crucial cognitive and literacy skills by parents and children through the LOTE
- . a better understanding of the Australian school system by parents
- . parents feeling more at home in the school
- . greater reliance on the day school as opposed to ethnic school to develop ethnic language competence
- . the establishment of language classes for majority parents

demand for the establishment of bilingual programs in the full-time school

Besides the views of participant adults, students' perceptions of bilingualism and bilingual education is also of interest. For example the NESB students, ranging from Year 5 through to tertiary, this writer has interviewed and reported upon over more than a decade, have been overwhelmingly happy to know more than one language. Further they were strongly committed to the maintenance of their home language (Foster, Rado and Lewis 1983).

The same views were expressed irrespective of experience with LOTE and bilingual learning. The monolingual ESB students were less favourably disposed but interest was not altogether lacking (Foster, Lewis and Rado 1980). It seems that many ESB students consider knowing a second language less relevant to their future needs. Nevertheless, it appears that there is a foundation to build upon for the development of effective language teaching programs.

In the course of evaluating the Multilingual Project (Foster, Rado and Rowley 1980) students' reaction to bilingual learning was investigated in the project thought that the bilingual method helped them to learn subject matter and to develop both their LOTE and English language skills.

The responses of members of four School Councils involved with Greek primary programs in the Melbourne metropolitan area are also of interest. These reactions can be regarded as typical. They were given in answer to a question about the good points of the bilingual programs at the respective schools (Cahill 1984:98).

- positive effect on English language: "First language literacy development with possibility of avoiding conceptual gaps evident in senior students".
- impact on self-concept: "Greek children learn self-respect and dignity".

178 *Bilingual education*

- impact on Greek language development: "It improves the knowledge of the Greek language of these children".

- initiation and integration into the Australian schooling system: "It lessens the burden on these children", "Beginners avoid the double trauma of starting school and a new language all at once", with dignity, they are not ashamed as they are part of everyone's school - there is no segregation. Teaching methods are regulated by Australian standards".

- classroom atmosphere: "As a non-Greek-speaking person observing the bilingual class I have found it a conservative but happy class. Children in the class have so much attention from caring adults in class time".

- parental interaction: "It gives parents comfort to know that they can discuss their child's progress intelligently with someone who understands them".

To sum up, what Lambert and Tucker (1972) had to say about the St. Lambert bilingual education experiment is, in view of the evidence presented here, true of carefully prepared and maintained bilingual programs generally. During the same period of time and with no apparent costs, the children in a bilingual program develop a competence in speaking, reading and writing that could never be matched by a standard LOTE program.

Conditions of success for bilingual education

In order to create and/or consolidate favourable conditions for the development of bilingualism a coordinated policy is required. In this section the reasons for a particular line of action are discussed and guidelines for its implementation given.

Planning at the Commonwealth and State Levels

As has been argued earlier, favourable attitudes to bilingualism are essential if language learning/teaching and bilingual education are to achieve superior results. Further, according a high status to LOTE also enhances interest in bilingualism. In the first instance these positive attitudes must be widespread in the whole

Australian community. Moreover, there should not be merely a passive acceptance but rather a positive recognition of the importance of dual language skills in the Australian population. Currently, some of the states are considered moves in that direction. (For example see Languages for Western Australians 1988, the Draft of the South Australian Education Department Languages Other Than English Plan 1987-95 and Victoria Languages Action Plan 1989).

Guideline 1: The development of bilingualism has a better chance of succeeding if not only English but also LOTE learning are including in a common curriculum framework. Continued effort could be expanded in convincing the Australian Education Council to reach agreement on this point.

Guideline 2: A co-ordinated Commonwealth/State Bilingualism Promotion Committee (preferably housed within a National Languages Institute) could be set up to mount a vigorous nationwide campaign on the importance of promoting LOTE learning. The targetted audience would be the general public and those directly affected by the outcomes of bilingual education, such as prospective employers. The usual print and electronic media sales strategies could be extended to film advertisement. The efforts already made in this direction could be co-ordinated and stepped up.

Guideline 3: Linguists and language educators could be encouraged to find ways of contributing to conferences/seminars in a variety of discipline areas in order to inform their colleagues on the nature of language and the benefits of bilingualism. This would be one way of gaining their support in the promotion of bilingualism.

Guideline 4: The establishment of a National Languages Institute would add prestige to LOTE learning. One of the functions of such an institute could be the multifaceted promotion of bilingualism in collaboration with existing professional associations of teachers and other professionals.

Planning at Provider Level

Ensuring the likelihood of a favourable climate for dual language development is equally important at the school community level. Consequently before a LOTE learning or bilingual education program is implemented in any form there should be a carefully orchestrated pre-planning stage involving all sections of the school community including administrators and students if the latter are old enough. One of the mechanisms that would have to be put into place is an effective Pre-planning Committee with administrative responsibilities.

A main consideration of this committee would be the creation or enhancement of a favourable climate within the school and the surrounding neighbourhood. Ethnic relations research as well as bilingual education evaluation reports indicate, that one cannot afford to be complacent. There is not only apathy towards multiculturalism and multilingualism in the community but also hidden racism among adults. Children are aware of such negative attitudes (Lewis, Rado and Foster 1983; Rado and Foster 1987). Under these circumstances they may not want to draw attention to themselves by participating in a bilingual program and so appear different.

Another important task of the Pre-planning Committee is choosing the LOTE for the bilingual program. This could involve lengthy negotiations with neighbourhood schools across all sectors as well as post-school or pre-tertiary and tertiary and tertiary institutions, parents and ethnic communities. Some of the states, including Victoria and Western Australia, are considering strategies for reaching consensus on this matter. (See Languages for Western Australia 1988; Language Choice Kit 1987; lo Bianco 1989).

In order to fulfil its various tasks the committee will have to engage in widespread dissemination of information and negotiation. This is most important as there is research evidence which suggests that failure to consult with and provide information to the school community is resented and militates against bilingual

education (for example see Cahill 1984).

Once the bilingual program has been established the Pre-planning Committee should set up a Steering Committee and then dissolve itself.

As with the Pre-planning Committee the membership of the Steering Committee should also be representative of the whole school community. The committee should act as the body responsible for the management of the program(s) in terms of needs and fulfilment of aims

Guideline 1: The Pre-planning Committee's tasks would include demonstrating a need or demand generally for the program(s), reaching consensus on language(s) to be involved, obtaining funding, ensuring consensus on the bilingual education model to be chosen and on staffing, ensuring availability of accommodation and teaching materials, being responsible for the circulation of information and final decision making.

Guideline 2: It is desirable to restrict language choice, with some adjustments to meet the needs of particular states, to the languages identified by the National Policy on Languages. Opting for a limited number of languages enhances the chances that the bilingual program will be appropriately resourced in terms of staff and materials. It will also facilitate and transition ensuring language continuing across the primary and postprimary programs.

Guideline 3: Strategies for language choice can be established on a statewide basis and made available to Pre-planning Committees (see Language Choice Kit, Ministry of Education, Victoria). For example, education authorities can develop survey instrument to gauge community attitudes and openness. This would provide information to school clusters which would help them in decision making.

Guideline 4: The formation of school cluster cooperate and extend across systems (including the TAFE sector and commercial language services) the variety of languages offered in one geographical area might be considerably expanded. Ethnic

schools could play a role here although it is recognised that their integration into mainstream schooling is a complex problem as yet unresolved (cf lo Bianco 1989).

Guideline 5: Liaising with tertiary institutions would also be desirable so that their expert advice can inform language choice and teachers training and their interest can be assured for the future.

The Steering Committee's tasks are in many ways similar to that of the Pre-planning committee with respect to securing adequate time allocation for the various components of the program, to ensuring the continued fulfilment of the material needs of the program(s), for the circulation of information and final decision making. In addition it should supervise the development of programs and ensure the reaching of consensus on issues as they arise. An important activity of the committee would be to liaise with those sections of the school community not directly involved with the programs with other relevant schools. This is particularly important in the case of schools that form a cluster.

Guideline 6: The Steering Committee can negotiate the time allocation for the various components of the program and so could ensure that LOTE is given an equal share with other subjects evenly distributed over the teaching week.

Guideline 7: The Steering Committee can establish procedures for the dissemination of information, for regular monitoring and reporting, for writing submissions and proposals, for funding and for the evaluation of the program. It can also arrange social occasions to facilitate personal contact among participants in a more informal atmosphere. Some of these occasions could include students as well as adults.

Involvement of the Whole School Staff

Every teacher in a school must understand the implications of living in a multicultural society and the nature of bilingualism.

There is need to establish the minimum requirement all teachers must fulfil as a condition of employment. Consequently, they must have accessible courses available to them.

The attitude of the staff not involved in the language program significantly contributes to success or failure of such programs (Cahill 1984). One way of obtaining the positive cooperation of these teachers is to involve them directly in the programs by exchanging information, eliciting contributions and inviting them to participate in evaluation. This would give them a sense of ownership.

Guideline 1: Tertiary institutions and educational authorities could discuss and come to an agreement on how to inform School Councils, principals and teachers of the implications of developing bilingualism. On this basis various types of seminars/workshops and courses could be planned.

Guideline 2: The whole staff can be given the opportunity to contribute LOTE and/or bilingual programs if at regular intervals meetings are arranged for exchanging information, for coordinating subject matter and teaching strategies where this is applicable purposes of interest to the teachers concerned (cf Reynolds and Rado Forthcoming).

Guideline 3: It is often possible to involve general staff in LOTE/bilingual programs if they are given the appropriate compensation for the time/effort required. Their contributions could range over a wide variety of activities including science experiments or an illustrated travelogue showing their own slides. The compensation could take the form of reciprocal arrangements so that extra cost would not be involved.

Qualification, Responsibilities and Needs of LOTE / Bilingual Program Staff

LOTE/bilingual programs staff must be an integral part of the school. They should seek every opportunity to interact with the rest of the staff in order to allay suspicions about standards and

envy because bilingual programs often require additional resourcing. Through informal contact they can disseminate a great deal of information. This should be done in addition to the formal meetings with colleagues mentioned above.

Besides the appropriate teacher qualifications, teachers in LOTE/bilingual programs require special expertise in teaching methodology; for example, how to deal with such phenomena as transference and non-standard grammar, the adaptation and development of curriculum materials. To do this effectively they need to keep abreast of latest developments in applied linguistics with respect to both theory and practice. This requirement applies to language as well as other subject teachers in a bilingual program.

Other expectations LOTE/bilingual program teachers need to fulfil include a commitment to the concept of bilingualism and multicultural education, a commitment to staying with the program for three to four years and willingness to involve parents on a regular basis (see Cahill 1984).

In general evaluation reports stress the needs to allocate time on a regular basis for staff who are team-teaching in a bilingual program to plan and, where appropriate coordinate the details of lessons or learning activities. Industrial agreement regarding allotments will have to be reached. These planning sessions can serve additional purposes such as evaluating the program and/or communicating with parents (see Reynolds and Rado forthcoming).

Guideline 1: Recreational arrangements during the school day associated with cultural events relevant to the bilingual program, could facilitate staff interaction on an informal basis. Other social events for the staff could also be arranged. Staff could be prepared to avail themselves of these opportunities.

Guideline 2: Teachers could be given every opportunity to upgrade their qualifications in a variety of ways according to the needs of their employment and their own inclination. They would need then to commit themselves to the completion of the program/course undertaken. Teachers can be encouraged to accept the

need for completing a variety of courses or more substantial degree.

Responsibilities of Tertiary Institutions

Apart from introducing general staff to bilingualism and bilingual education, tertiary institutions and education authorities could also make arrangements for the specialist training of prospective bilingual education teachers. In particular teachers of subjects with tangible career implications, who already have a LOTE, could be given incentives to add their qualifications in this regard.

Conveniently, the need for and the nature of courses required by teachers has been documented by the Child Migrant Education Services sponsored State Conference on Teacher Education for English as a Second Language Community Languages and Bilingual Education hosted by La Trobe University. The recommendations of the conference are well suited to serve as a blueprint for action in that they specify the targetted teachers, the prerequisites for entry into the courses, their content, duration and accreditation procedures (1985:128). In addition to Bianco's contribution helpfully lists some of the competencies and skills primary community language teachers need (1985:49).

Pleasingly the conference also pays attention to higher degrees, resources and implementation and the training requirements of teacher educators. Although the conference's concerns included bilingual education teachers, it did not cover all needs of this group. Notably it did not address the major issue of developing a bilingual teaching methodology. This requirement is now recognised by the Victorian Ministry of Education for example, so that an agreement has been reached with five tertiary institutions to offer such a methods component in future.

The conference recommendations need to be supplemented in other ways as well. They focus on the preparation and inservicing of qualified teachers, whereas it is the contention of this

writer that other personnel also need specialist courses. The group in question includes teacher aides, ethnic teachers, interpreters and translators, counsellors and social workers, speech therapists, medical professionals, school librarians and office staff (see Rado 1984b and 1985a).

The shortage of bilingual staff is a recurrent theme in bilingual education evaluation reports. The ministerial Working Party on LOTE in its Report *Languages for Western Australians* (1988:79), has identified several categories of persons who might be recruited as potential teachers of LOTE. The same categories would be pertinent for bilingual teachers.

Guideline 1: Tertiary institutions and education authorities could discuss and agree on offering a wide range of courses to the several categories of personnel described above.

Guideline 2: Courses for specialists in bilingual teaching could be advertised among persons listed by a Ministerial Working Party such as that mentioned above.

Guideline 3: Incentives could be given to tertiary institutions to offer courses such as those mentioned above.

Parents, Relatives, Other Individuals and the Ethnic Community

It is generally regarded as good practice to have parents involved with different facets of their children's schooling. This notion can be profitably extended to other adults with LOTE skills. Of particular interest would be the involvement of the relevant language community as such because in this way an additional context would be created complementing that of home learning, LOTE and subject matter learning at school. Even if the LOTE community context would be weaker than the wider English-speaking community context it could play a useful role in the development of bilingualism. This can be seen from the role some clubs/associations play in the life of their adult and child/youth members by becoming the focal point of their social life. (This is

the case for all language groups including English speakers.)

One of the issues which frequently occur in home-school relations is the need for parent representation on various school committees including curriculum planning and the involvement of individual parents with the school. This is even more important in the case of LOTE/bilingual education programs so that expectations are realistic and content, particularly in cultural matters, adjusted to the Australian context.

Parents are their children's first, albeit non-conscious, language teachers. As the children grow older the parents' influence on their children's language development weakens but nevertheless remains significant. The competitive influences are teachers and peers (cf Saunders 1988). The latter are very significant during adolescence (Labov 1975). We now know enough about bilingual and L2 development to give parents sound advice. Language learners, irrespective of age, need a comprehensible (Krashen 1982) but also appropriate language input in grammatical and stylistic terms (Rado 1985b). The implications of being regularly exposed to the idiosyncratic speech or interlanguage of the L2 learner has been discussed by this writer (Rado and Foster 1986 a&b) documenting the English language use of NESB parents.

There is good reason to believe that the interlanguage English environment provided by many NESB parents is counter productive from the point of view of English language development and perhaps even language development generally.

Negative effects of interlanguage can be explained as follows. Because interlanguage speakers often use unpredictable forms, they are difficult to understand in accurate detail. Children regularly exposed to such speakers may get used to accepting vagueness in communication even in situations where accurate comprehension is essential as, for example, in subject matter learning.

On the other hand, as mature speakers of their mother tongue NESB parents, irrespective of their level of education, have an important role play in their children's LOTE development,

especially if they use it consistently and show that they value it.

The sophistication of verbal interaction between parents and children will change over the years but not the principles governing it. There are sound linguistic reasons to believe that the non-reciprocal use of a language, in other words answering in English when addressed in the LOTE, does not foster language development. For example it does not offer the opportunity to use cohesive devices across speaker utterances and therefore it is more difficult to keep track of what is being talked about.

The consistent use of the mother tongue in the home and with relatives and friends would enhance the chance that the children would be involved with a variety of discourse forms used for different purposes and in different situations. It must be understood that variety in language use is an important factor in language development.. NESB students have a unique chance to become superior bilinguals if they attend a bilingual program and if at the same time their parents provide a dynamic LOTE speaking environment for them.

The actual strategies for how to liaise with parents and involve them in their children's education have already been proposed and/or implemented by some of the states. For example the list of recommendations of the Japanese School attached to the Commercial Road Primary School in Malvern, Victoria makes several references to Japanese parent involvement. Further, the Statewide Multicultural Education Coordinating Unit of the Victorian Ministry of Education has produced a video (come and See) and an accompanying package (Nesb Parent Participation Support Material 1989) to explain and facilitate the tasks of schools in promoting NESB parent participation.

Guideline 1: Guidelines, broadened to include all parents and made available by state educational authorities, would enable schools to maintain parent interest and involvement without having first to develop the necessary support materials. These would be available to schools in English and the LOTE. They would contain notices, specifications of personnel required,

bibliographies and strategies for running sessions with parents.

Guideline 2: Schools could ensure that the informational material directed at parents and available from the various resource/support centres actually reach their targetted audience. If reading circles are formed the relevant publications could be profitably discussed in small language groups. In this way the chance that good ideas are put into practice would be enhanced.

Guideline 3: The following suggestions to parents would probably lead to good results:

- . using the language involved consistently, that is avoiding indiscriminate switching
- . adoption of the one-person-one language strategy
- . acceptance of a mixed code during the first phase of language acquisition
- . after phase one encouragement of language separation, for example by pretending not to understand
- . playing (language) games with the children
- . accepting the gradual progress in separating the vocabulary and syntax of the two languages during the transition period from phase two to phase three
- . encouragement of speaking to people only in the appropriate language
- . setting a time aside when siblings speak to each other in LOTE
- . identifying pets as understanding the LOTE
- . making talking enjoyable
- . being a patient listener
- . telling and or reading stories to children
- . listening to children reading aloud even if what is read is not fully understood by the parents because of limited knowledge of the language
- . making sure that monolingual peers are not excluded from the conversation
- . if the school atmosphere is accepting, speaking the LOTE in front of teachers and peers

- . helping children to cope with teasing because of their bilingualism
- . judicious persistence in overcoming resistance in children to using the LOTE
- . casually supplying the language needed by children for successful communication in the LOTE
- . correcting children's language, but in moderation
- . teaching children to read and write in the LOTE
- . viewing and discussing LOTE television programs with the children
- . expecting less accuracy in the LOTE than in English
- . expecting less fluency in the LOTE immediately after a day of English at school
- . taking peer pressure to use English into account
- . keeping up to date with language changes in the home country e.g. how to refer to new inventions and/or events

(Based on Saunders 1988 and FKA Multicultural Resource Centre Parent Information Sheets 1989).

Guideline 4: Besides casual everyday conversations there could be occasions created by parents where ideas and opinions are exchanged so that, besides conversational and narrative prose expository prose in children's language development see Christie 1984). Such an environment is often enriched with the help of the extended family, failing that or in addition to it, friends and ethnic associations and clubs can broaden the opportunities of language use.

Guideline 5: Parents, other member of LOTE-speaking communities, for example the elderly or women with small children, who are free during day-time hours, can participate in lessons in various ways depending on the age-group. For example they can read or tell stories in the LOTE, teach songs, discuss issues, reflect on personal experiences, act as native speaker judges or oral competence. They can also help in the preparation of teaching materials. The problem does not reside in their ability

to contribute but rather in their confidence to do so. There is no doubt that teachers often despite their efforts encounter difficulties in involving parents in programs (Cahill explored this source of support further).

Guideline 6: ESB parents' contribution to their children's English language development would be similar to that of NESB parents' in the LOTE. But in addition they can also contribute to the children's LOTE development by showing interest in various ways. For example if they know the LOTE, they can practise it with their children at specified times, they can also watch films/videos in the LOTE with their children.

Guideline 7: ESB parents can help by participating in various activities the school promotes for LOTE learners and in actively seeking contact with members of the relevant ethnic communities.

Guidelines 8: The ethnic communities themselves can play a role in promoting cross-linguistic and -cultural contact by offering occasions to other groups to join them.

Students

Since motivation such a significant role in language development it is important to maintain student interest. This can be done by involving students in the program through committee representation (if they are old enough) and by giving them some responsibility in the learning/teaching process.

Student participation raises the question of language choice. Should students have a say in what language they learn and not only in what and how they learn as is advocated by the process approach (see Breen 1978a,b). In some early childhood education programs, that is in child care, kindergarten and primary grades, a child-centred approach has been adopted. Children have access to both English-speaking and LOTE-speaking staff with whom they interact according to their own choice. However, sometime(s) during the day they are grouped in such a way that they are bound to use English. The English used is based on the child's observed

language needs. Catholic Education Office in Victoria also advocates a child centred "integrative" approach. This is based on the child's language use experiences in the LOTE.

In the case of older primary school and postprimary bilingual programs an integrated approach is more difficult to implement as the subject areas are most clearly defined. Here subject and language is usually paired for a given year which makes student language choice difficult. However, if it is considered important for bilinguals to be able to draw on both their languages while learning, then the type of student-centred approach advocated by the Multilingual Project (Rado 1984) offers a solution.

Since the influence of peers is such a powerful force in language choice and use students' friendship patterns are of considerable importance. This is an aspect of language learning where students can take the initiative. They can follow up the "buddy" system sometimes used by kindergarten and primary school teachers who pair ESB and NESB children to stimulate the latter's English language development.

Guideline 1: Students could be prepared for participate in appropriate curriculum development meetings.

Guideline 2: Students could help in organising cross-cultural social occasions for their parents and other members of the school and relevant ethnic communities.

Guideline 3: Students could seek cross-linguistic friendships.

Guideline 4: Students could actively seek opportunities for using their LOTE.

Evaluation, Assessment and Accreditation

Ongoing evaluation of bilingual programs is essential because they are under suspicion and therefore have to prove themselves. Further, because of their experimental nature information on pitfalls and successful practices is most valuable (see Rubichi n.d.). Evaluation can take various forms. A single teacher will probably not want to employ all of these but a term of teachers

might do so. What is emphasised here is that some evaluation should be built into any program as an integral part of it.

Besides the evaluation of LOTE/bilingual programs as such, the accreditation of individual student achievement is of great importance because of its future career implications. Bilingual students may well ask why they should expend additional time and effort in developing their bilingualism if this not acknowledged in any way.

Education authorities in Australia have no mechanism at present whereby they can examine and accredit general subjects in a LOTE.

With regard to LOTE the National Assessment Framework for Languages at Senior Secondary Level Project (1987:4), which works in close cooperation with the ALL Project, offers assessment schemes for courses at three levels. The General, Extended and Specialist Studies Courses "are designed to cover a continuum of development in competence to use languages". This may solve the problem in states that have a multilevel examination system but this is not always the case. Take Victoria, for example, which under the new VCE is strongly committed to the single level "common assessment tasks" concept.

This concept is not relevant to tertiary institutions and therefore their varied accreditation systems cannot help as models. There is one development, however, which could shape future bilingual education accreditation and that is the concept of a double degree. For example the structure of the Bachelor of Arts (Chinese) / Bachelor of Business degree offered by Victoria College demonstrates how different areas of learning can be jointly credited (cf lo Bianco (1989) on cross-accreditation).

A few schools in Australia which place emphasis on bilingual skills prepare their students for the International Baccalaureate (IB). The courses the IB offers and the method of examining are strictly traditional in a way that is not harmony with current pedagogy in Australia. Therefore, despite the fact that the IB promotes a high degree of proficiency and the ability to study in

more than one language it does not satisfy the requirements of majority of our student population.

It seems then that what is needed is an independent accreditation authority whose function would be to assess specialist skills in terms of knowing English and a LOTE and being able to study successfully in more than one language. There is a precedent in Australia in the independent examination of the performing arts.

With respects to examining language skills the British Institute of Linguists Syllabus Development Project could give some guidance. The project is intended to serve the accreditation needs of adults active in an occupation or profession. The examination is not tied to a particular course and can be taken at five different levels. At the higher levels a modular approach is adopted.

Modules are free-standing tests and one or more modules can taken at a time. Letters of credit profiling the type of proficiency candidate has demonstrated in each instance are awarded for each module passed. These letters of credit remain valid for a total of five years and can be accumulated until the full certificate is obtained.

(British Institute of Linguists Syllabus
Development Project 1988:6)

The approach is task so that skills are not assessed separately. Candidates' performance is judged either successful or not, but distinctions are awarded for outstanding performances.

The National Accreditation Authority for Translators and Interpreters (NAATI) is an example for an independent language skills examining body in Australia in a highly specialised area. NAATI also offers five levels of accreditation. Certification can be obtained on the basis of success in a NAATI test or by successfully completing a NAATI -approved course. One pre-requisites for admission to the tests is experience in interpreting and/or translating.

Significantly NAATI would like to see the establishment of a

National Language Testing Unit with much broader responsibilities.

Guideline 1: Programs can be evaluated in the basis of students' achievements. These can be compared with the achievements of students not in the program.

Guideline 2: Students' and parents' satisfaction with the program can be canvassed by means of questionnaires or interviews.

Guideline 3: If the outcomes of program-planning sessions are planning sheets and if what has been done and achieved by the students is recorded on a record sheet, comparison of the two would yield useful information on the degree to which the aims of the program have been achieved.

Guideline 4: Another approach to evaluation places emphasis on the needs for parents to know what the program is doing. Meeting parents in small groups, informing them and taking note of their responses for improvement of the program would serve motivational as well as evaluation purposes. If students were involved in the reporting to parents this would be sound practice and relieve the teacher from some of the additional work.

Guideline 5: Profiting from the experience of independent accreditation authorities a Specialist LOTE/Bilingual Education Authority could be set up to accredit students who elect to sit for the level and type of examination of their choice.

Guideline 6: Specialist Authority examinations would not be tied to courses and would be supplementary to the certificate issued by any State Accreditation Authority.

Guideline 7: The TAFE sector could cooperate with schools in supplementing LOTE/bilingual education programs.

Transition to Tertiary

The prospect of further study in a particular area is a powerful incentive in maintaining interest in a particular subject area. Bilingual education does not only need accreditation procedures

but also indications of a career path at tertiary level.

Guideline 1: Tertiary language departments could make provisions for bilingual students in their course structure by allowing them to accelerate and/or combine degrees.

Guideline 2: Tertiary institutions could consider offering a range of degree courses combined with LOTE studies.

Guideline 3: As an incentive Tertiary institutions could give a bonus to students with a LOTE at the time of entry into a course. (For example Monash University and Victoria College have adopted such as an incentive).

Support Services

It is now recognised that learning/teaching is an activity that needs a variety of support services in the form of personnel besides classroom teachers and various types of materials. LOTE/bilingual education is no exception. Like other subject areas it needs a coordinator and liaison teacher, expert pedagogic consultant advice but also specialist help from linguists and interpreters/translators.

Resource materials can be a problem since the student population studying in a particular language would be relatively small so that the publication of suitable materials would be very costly. Importing textbooks from the country of origin is usually not practicable because as we have seen bilingual students language proficiency is different from that of students entirely schooled in their mother tongue. In this situation greater reliance will have to be placed on teacher produced materials.

A variety of materials will have to be developed to satisfy the need for factual information as well as for entertainment.

The strategies for pooling, exchanging and circulating resources have already been worked out. This is the task allocated to support/resource centres. What is needed now is the vigorous promotion of these services and their physical extension into where the relevant materials can be housed as a collection

together with the necessary electronic equipment utilising telematic and distance education technology. (See developments in South Australia and Victoria: Educational Technology Centre Tarcoola Project 1981; Steering Committee Report to the South Australian Education Department on Distance Education 1984; Central Highlands-Wimmera Region Proposal to the Australian Schools Commission 1985; lo Bianco 1989). This could make the materials more easily accessible to students leading to their greater use.

Networking is another strategy that should help in curriculum and material development and in maintaining enthusiasm for the tasks in hand.

Guideline 1: Schools could ensure that on their curriculum committee LOTE/bilingual education is represented by the teacher in charge.

Guideline 2: Schools could allocate a room for a LOTE/bilingual education resources centre.

Guideline 3: Students could be encouraged to pursue individualised studies in the school's resource room.

Guideline 4: Schools in cooperation with resource centres could facilitate the networking of teachers.

Guideline 5: Special funds could be allocated to schools and resource centres to make the development of materials possible.

Guideline 6: Every resource centre could have a LOTE/bilingual education specialist.

Guideline 7: Resource centre activities could include the publication of a LOTE/bilingual education newsletter, relevant exhibitions and their circulation among centres, in-service sessions and cultural and social activities for teachers as well as students and parents.

REFERENCES

- Anderson, T. (1981) *A Guide to Family Reading in Two Languages: The Preschool Years*. Rosslyn, Virginia: National Clearinghouse for Bilingual Education.
- Andreoni, G. (1980) L'italo-australiano e la sua importanza sociolinguistica. Paper delivered at Conference of Italian Teachers, Canberra, February 1980.
- Anisfield, E. (1964) A comparison of the cognitive functioning of monolinguals and bilinguals. Ph.D. thesis, McGill University.
- Appel, R. and P. Muysken (1987) *Language Contact and Bilingualism*. London: Edward Arnold
- Appel, R., H. Everts, and J. Teunissen (1986) Het Leidse onderwijsexperiment. *Moer* : 141-148
- Arkwright, T. and A. Viau (1974) Les processus d'association chez les bilingues. *Working Papers on Bilingualism* 2:57-67.
- Arnberg, L. (1979) Language strategies in mixed nationality families. *Scandinavian Journal of Psychology* 20: 105-112
- Arnberg, L. (1981) *A Longitudinal Study of Language Development in Four Young Children Exposed to English and Swedish in the Home*. Linköping Studies in Education, Dissertation No 14. Linköping, Sweden: Linköping University.
- Arnberg, L. (1987) *Raising Children Bilingually: The Preschool Years*. Clevedon: Multilingual Matters
- Arnberg, L. and P. Arnberg (1985) The relation between code differentiation and language mixing in bilingual three- to four year-old children. *Bilingual Review* 12(1-2) : 20-32
- Baetens Beardsmore, H. (1982) *Bilingualism: Basic Principles*. Clevedon : Tieto Ltd.
- BAGIV (Bundesarbeitsgemeinschaft der Immigrantenverbände in der Bundesrepublik Deutschland und Berlin West) (ed.) (1985) *Muttersprachlicher Unterricht in der Bundesrepublik Deutschland. Sprach- und bildungspolitische Argumente für eine zweisprachige Erziehung von Kindern sprachlicher Minderheiten*. Hamburg: Rissen.
- Bain, B. (1975) Toward an integration of Piaget and Vygotsky: bilingual considerations. *Linguistics* 160: 5-20

200 References

- Bain, B. and A. Yu (1978) Toward an integration of Piaget and Vygotsky: a cross-cultural replication (France, Germany, Canada) concerning cognitive consequences of bilinguality. In M. Paradis (ed) *Aspects of Bilingualism*. Columbia: Hornbeam Press
- Bain, B. and A. Yu (1980) Cognitive consequences of raising children bilingually: 'One parent, one language'. *Canadian Journal of Psychology* 34(4) : 304-313
- Bain, B. Verbal regulation of cognitive processes: a replication of Luria's procedures with bilingual and unilingual infants. *Child Development* 47: 543-546
- Baker, C (1988) *Key Issue in Bilingualism and Bilingual Education*. Clevedon, Avon: Multilingual Matters.
- Barik, H.C. and M. Swain (1976) A longitudinal study of bilingual and cognitive development. *International Journal of Psychology* 11: 251-263
- Ben-Zeev, S. (1977a) The influence of bilingualism on cognitive strategy and cognitive development. *Child Development* 48: 1009-1018
- Ben-Zeev, S. (1977b) The effect of bilingualism on children from Spanish-English low economic neighbourhoods on cognitive development and cognitive strategy. *Working Papers on Bilingualism* 14: 83-122
- Bergan, J. and E. Parra (1979) Variations in IQ testing and instruction and the letter learning and achievement of Anglo and bilingual Mexican-American children. *Journal of Educational Psychology*, 71(6) 819-26.
- Bergman, C.R. (1976) Interference versus independent development in infant bilingualism. In Keller, Teschner and Viera (eds)
- Bettoni, C. (1981) *Italian in North Queensland*. Townsville: James Cook University.
- Bettoni, C. (1985) *Tra lingua, dialetto e inglese. I trilinguismo degli Italiani in Australia*. Sydney: FILEF Italo-Australian Publications.
- Bettoni, C. and J. Gibbons (1988) Linguistic purism and language shift: a guise-voice study of the Italian community in Sydney. *International Journal of the Sociology of Language* 72: 15-35
- Bialystok, E. (1988a) Influences of bilingualism on metalinguistic development. *Second Language Research* 3(2) : 154-166

- Bialystok, E. (1988b) Levels of bilingualism and levels of linguistic awareness. *Developmental Psychology* 24(4) : 560-567
- Blank, M. (1975) Mastering the intangible through language. *Annals of the New York Academy of Science* 263: 44-69
- Bloomfield, L. (1933) *Language*. New York: Holt.
- Brennan, A. (1987) Teaching a trilingual child to read. *Bilingual Family Newsletter* 4(3).
- Brent Palmer, C. (1979) A sociolinguistic assessment of the notion 'immigrant semilingualism' from a social conflict perspective. *Working Papers on Bilingualism* 17: 137-180
- Brown, R. (1973) *A First Language*. Cambridge, MA: Harvard University Press
- Burling, R. (1959) Language development of a Garo and English speaking child. *Word* 15: 45-68
- Bus, A.G. and M.H. van IJzendoorn (1988) Mother-child interactions, attachment and emergent literacy: a cross-sectional study. *Child Development* 59: 1262-1272
- Cairns, E. (1982) Intergroup conflict in Northern Ireland. In H. Tajfel (ed) *Social Identity and Intergroup Relations*. Cambridge: C.U.P.
- Callan, V.J. and C. Gallois (1982) Language attitudes of Italo-Australian and Greek-Australian bilinguals. *International Journal of Psychology* 17: 345-358
- Callan, V.J., C. Gallois and P.A. Forbes (1983) Evaluative reactions to accented English. Ethnicity, sex roles and context. *Journal of Cross-Cultural Psychology* 14(4) : 407-426
- Carringer, D. (1974) Creative thinking abilities of a Mexican youth. The relationship of bilingualism. *Journal of Cross-Cultural Psychology*, 5(4) 492-50005.
- Chrstian, C. (1977) Minority language skills before age three. In W. Mackey and T. Anderson (eds.) *Bilingualism in Early Childhood*, Rowley: Newbury House.
- Clark, E. (1979) *The Ontogenesis of Meaning*. Wiesbaden: Akademische Verlagsgesellschaft
- Clark, R. (1974) Performing without competence. *Journal of Child Language* 1: 1-10
- Clark, R. (1977) What's the use of imitation. *Journal of Child Language* 4: 341-358
- Clyne, M.G. (1967) *Transference and Triggering. Observations on Language Assimilation of Post-War German Speaking*

202 References

- Migrants in Australia*. The Hague: Nijhoff.
- Clyne, M.G. (1968) The maintenance of bilingualism. *The Australian Journal of Education*, 12, 125-30.
- Clyne, M.G. (1969) Switching between languages. *Actes du 10ème Congrès Internationale des Linguistes*. Vol. 1. Bucharest: Edition de l'Académie de la République Socialiste de Roumanie
- Clyne, M.G. (1970) Some aspects of the bilingualism and language maintenance of Australian-born children of German-speaking parents. *ITL*, 9, 35-47.
- Clyne, M.G. (1972a) *Perspectives on Language Contact*. Melbourne: The Hawthorn Press.
- Clyne, M.G. (1972b) Some (German-English) language contact phenomena at the discourse level. In E. Firschow et al. (eds) *Studies for Einar Haugen*. The Hague: Mouton.
- Clyne, M.G. (1973) Thirty years later: Some observations on "Refugee German" in Melbourne. In H. Scholler and J. Reidy (eds) *Lexicography and Dialect Geography, Festgabe Für Hans Kurath*. Wiesbaden: Franz Steiner Verlag.
- Clyne, M.G. (1974) Language contact and language ecology in Australia. In M. Rado (ed.) *Bilingual Education. Papers Presented at the Third Language Teaching Conference held at La Trobe University*. Bundoora: La Trobe University.
- Clyne, M.G. (1977) Bilingualism of the elderly. *Talanya*, 4, 45-56.
- Clyne, M.G. (1980a) Triggering and language processing. *Canadian Journal of Psychology* 34(4) : 400-406
- Clyne, M.G. (1980b) Primary School Languages and Bilingual Education: Some Overseas Research and Legends. *Australian Review of Applied Linguistic* 3 (1): 29-38)
- Clyne, M.G. (1981) *Deutsch als Muttersprache in Australien: Zur Ökologie einer Einwanderersprache*. Wiesbaden: Franz Steiner Verlag.
- Clyne, M.G. (1983) *Multilingual Australia*. Melbourne: River Seine.
- Clyne, M.G. (1985) Language Teaching for Inter-Cultural Communication: What Goals for Whom? In Jankowsky, K.R. (ed) *Scientific and Humanistic Dimensions of Language*. Amsterdam/Philadelphia: John Benjamins.
- Clyne, M.G. (1986b) The Scope and Method of this Project. In Clyne, M (ed).

- Clyne, M.G. (1986c) Features of Children's Oral German. In Clyne, M (ed).
- Clyne, M.G. (1988a) Community languages at home a first progress report. *Vox* 1:22-28.
- Clyne, M.G. (1988b) The German-Australian speech community: ethnic core values and language maintenance. *International Journal of the Sociology of Language* 72: 67-83
- Clyne, M.G. (ed) (1976) *Australia Talks*. Pacific Linguistics, Series D, No. 23 Canberra: Australian National University.
- Clyne, M.G. (ed) (1985) *Australia, Meeting Place of Languages*. Pacific Linguistics C-92. Canberra: Australian National University
- Clyne, M.G. (ed) (1986a) *An Early Start*. Melbourne, River Seine.
- Cohen, A.D (1975) *A Sociolinguistic Approach to Bilingual Education*. Rowley, Mass: Newburg House.
- Cohen, B.H (1979) *Models and Methods for Bilingual Education*. Hingham, MA: Teaching Resources Corporation.
- Cohen, G. (1977) *The Psychology of Cognition*. London: Academic Press.
- Cordasco, F. (1976) *Bilingual Schooling in the United States*. New York: McGraw-Hill.
- Cummins (1984b) Wanted: a theoretical framework for relating language proficiency to academic achievement among bilingual students. In C. Rivera (ed.) *Language Proficiency and Academic Achievement*, 2-19. Clevedon: Multilingual Matters Ltd.
- Cummins, J. (1974) Bilingual cognition: a reply to Neufeld. *Working Papers on Bilingualism* 4: 99-105
- Cummins, J. (1976) The influence of bilingualism on cognitive growth: a synthesis of research findings and explanatory hypothesis. *Working Papers on Bilingualism* 9: 1-43
- Cummins, J. (1977) Cognitive factors associated with the attainment of intermediate levels of bilingual skills. *Modern Language Journal* 61: 3-12
- Cummins, J. (1978a) Bilingualism and the development of metalinguistic awareness. *Journal of Cross-Cultural Psychology* 9: 131-149
- Cummins, J. (1978a) Educational Implications of Mother Tongue Maintenance in Minority Language Groups. *The Canadian Modern Language Review* 34 (2)
- Cummins, J. (1979a) Linguistic interdependence and the

204 References

- educational development of bilingual children. *Review of Educational Research* 49: 222-251
- Cummins, J. (1979b) Cognitive academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism* 19:197-205
- Cummins, J. (1980a) Psychological Assessment of Immigrant Children: Logic or Intuition *Journal of Multilingual and Multicultural Development*. 1(2): 97-111.
- Cummins, J. (1980b) The Cross-Lingual Dimensions of Language Proficiency: Implications for Bilingual Education and the Optimal Age Question. *TESOL Quarterly* 14:175-187
- Cummins, J. (1983) Language Proficiency and Academic Achievement. In Oller J.W Jr (ed) *Issues in Language Testing Research*. Rowley, Mass: Newburg House.
- Cummins, J. (1984) *Bilingualism and Special Education: Issues in Assessment and Pedagogy*. Clevedon: Multilingual Matters.
- Cummins, J. and M Gulutsan (1974) Some effects of bilingualism on cognitive functioning. In S.T. Carey (ed) *Bilingualism, Biculturalism and Education*. Edmonton: University of Alberta Press
- Cummins, J. and M. Swain (1983) Analysis-by-rhetoric: reading the text or the reader's own projections? A reply to Edelsky et al. *Applied Linguistics* 4(1) : 23-41
- Cummins, J. and R. Mulcahy (1983) Orientation to language in Ukranian-English bilingual children. *Child Development* 49:1239-42.
- Cummins, J.P. and M. Swain (1986) *Bilingualism in Education*. London: Longman
- Curriculum Frameworks Project (1988) *The LOTE Framework P-10*. Melbourne: Victorian Ministry of Education, Curriculum Branch)
- Darcy, N. (1953) A review of the literature on the effects of bilingualism upon the measurement of intelligence. *Journal of Genetic Psychology* 82: 21-57
- De Jong, E. (1986) *The Bilingual Experience. A Book for Parents*. Cambridge: Cambridge University Press.
- de Hower, A. (1987) Two at a Time: An Exploration of How Children Acquire Two Languages from Birth. Ph.D. thesis.

- Brussels: Free University of Brussels
- de Villiers, J.G. and P.A. de Villiers (1973) A cross sectional study of the development of grammatical morphemes in child speech. *Journal of Psycholinguistic Research* 2: 267-278
- Department of Employment, Education and Training (1988) *Girls in Schools*. Report on the National Policy for the Education of Girls in Australian Schools. Canberra: AGPS.
- Di Biase, B., and B. Dyson (1988) *Language Rights and the School*. Sydney: Inner City Education Centre/FILEF-Italo-Australian Publications.
- Diaz, R.M. (1985) Bilingualism cognitive development: Addressing three gaps in current research. *Child Development* 56:1376-88.
- Diebold, A. (1961) Incipient Bilingualism. *Language* 37:97-112.
- Diebold, A.R. Jr (1968) The consequences of early bilingualism in cognitive development and personality formation. In E. Norbeck *et al.* (eds) *The Study of Personality; An Interdisciplinary Appraisal*. New York
- Distance Education (1984) Steering Committee Report to the Senior Executive of South Australian Education Department.
- Dodson, C. (1984) Living with two languages. *Bilingual Family Newsletter* 1(1) : 2-3
- Dodson, C.J. (1983) Living with two languages. *Journal of Multilingual and Multicultural Development* 4(6) : 401-414
- Dolson, D.P. (1985) The effects of Spanish home language use on the scholastic performance of Hispanic pupils. *Journal Of Multilingual and Multicultural Development* 6: 135-155
- Döpke, S. (1986) Discourse structures in bilingual families. *Journal of Multilingual and Multicultural Development* 7(6) : 493-507
- Döpke, S. (1988) 'One Parent-One Language': An Interactional Approach. Unpublished Ph.D. thesis. Clayton, Vic.: Monash University
- Döpke, S. (in preparation) A young bilingual's struggle to comply with the 'one parent-one language' rule.
- Douglas, D. (1981) An explanatory study of bilingual reading proficiency. *Learning to Read in Different Languages* 1:93-103.
- Doyle, A., M. Champagne and N. Segalowitz (1978) Some issues

206 References

- in the assessment of linguistic consequences of early bilingualism. In M. Paradis (ed) *Aspects of Bilingualism*. Columbia, SC: Hornbeam
- Dubin, F and E. Olshtain (1986) *Course Design, Developing Programs and materials for Language Learning*. Cambridge: Cambridge University Press.
- Dulay, H. and M. Burt (1975) *New Directions in Second Language Learning, Teaching and Bilingual Education*. Washington: TESOL
- Dulay, H. and M. Burt (1978) Some aspects of creativity in language Acquisition. In W.C. Ritchie (ed.) *Second Language Acquisition Research*. New York: Academic Press.
- Dulay, H., M. Burt and S. Krashen (1982) *Language Two*. new York: Oxford University Press.
- Eckstein, A. (1982) Multicultural society? *Journal of Intercultural Studies* 3(2): 148-169.
- Eckstein, A. (1986) Student reaction. In Clyne, M (ed).
- Edelsky, C. (1986) *Writing in a Bilingual Program*. Norwood, N.J.: Ablex.
- Edelsky, C., B. Altwegger, F. Barkin, B. Flores, S. Hudelson and K. Jilbert (1983) Semilingualism and language deficit. *Applied Linguistics* 4(1) : 1-22
- Education Department, South Australia (1981) *Tarcoola Project* Educational Technology Centre, Education Department, South Australia.
- Edwards, J. (1977) Ethnic Identity and Bilingual Education. in Giles, H. (ed) *Language, Ethnicity and Intergroup Relations*. New York: Academic Press.
- Ellis, R. (1985) *Understanding Second Language Acquisition*. Oxford: Oxford University Press.
- Elwert, W.T. (1959) *Das zweisprachige Individuum: Ein Selbstzeugnis*. Mainz: Verlag der Akademie der Wissenschaften und Literatur
- Endrody, T. (1971) Prepositional Interference and Deviation in Migrant German and Migrant Hungarian. M.A. thesis, Monash University.
- Engle, P.L (1975) Language Medium in Early School Years for Minority Language Groups. *Review of Educational Research* 45 (2): 283-325.
- Engle, P.L (1975) *The Use of Vernacular Languages in Education*.

- Arlington, Virginia: Centre for Applied Linguistics.
- Erickson, J.G and Omark, D.R (eds) (1981) *Communication Assessment of the Bilingual Bicultural Child*. Baltimore: University Park Press.
- Ervin S.M. & C.E. Osgood (1954) Second language learning and bilingualism. *Journal of Abnormal and Social Psychology: Supplement* 49: 139-46.
- Ervin-Tripp, S. (1971) Social dialects in developmental sociolinguistics. In R. Shuy (ed.) *Sociolinguistics: A crossdisciplinary perspective*. Washington: Center for Applied Linguistics, 35-64.
- Ervin-Tripp, S.M. (1974) Is Second Language Learning Like the First? *TESOL Quarterly* 8(2): 111-121.
- Escobedo, T.H (1983) *Early Childhood Bilingual Education*. New York: Teachers College, Columbia University.
- Færch, C., K. Haarstrup and R. Phillipson (1984) *Learner Language and Language Learning*. Clevedon: Multilingual Matters.
- Fantini, A. (1978) Bilingual behaviour and social cues: case studies of two bilingual children. In Paradis (ed)
- Fantini, A. (1985) *Language Acquisition of a Bilingual Child: A Sociolinguistic Perspective*. Clevedon: Multilingual Matters
- Fasold, R. (1984) *The Sociolinguistics of Society*. Oxford: Blackwell
- Fatham, A (1975) The relationship between age and second language productive ability. *Language Learning* 25 (2): 245-253.
- Feldman, C. and M. Shen (1971) Some language related cognitive advantages of bilingual five-year olds. *The Journal of Genetic Psychology* 118: 235-244
- Ferguson, C. and D.I. Slobin (eds) (1973) *Studies of Child Language Development*. New York: Holt, Rinehart and Winston
- Fishman, J. (1971) *Sociolinguistics: A Brief Introduction*. Rowley: Newbury House.
- Fishman, J.A (1970) Sociolinguistic perspective on the study of bilingualism. *International Review of Applied Linguistics* 8 (2): 97
- Fishman, J.A (1975) Worldwide perspective on the sociology of bilingual education. In Troike, R.C and Modiano, N (eds) *Proceedings of the First Inter-American Conference on Bilingual Education*. Arlington, Virginia: Centre for Applied

Linguistics.

- Fishman, J.A (1976) *Bilingual Education*. Rowley, Mass: Newbury House.
- Fishman, J.A and R.L. Cooper (1969) Alternative measures of bilingualism. *Journal of Verbal Learning and Behaviour* 8:276-282.
- Foster, L and D. Stockley (1980) *A Socio-Political Study of the Concept and Role of Ethnic Teacher Aides in Victorian Schools*. ERDC Research Report.
- Foster, L and M. Rado (1985) *Language Resources among 1984 Diploma of Education Students*. La Trobe University Research Report.
- Foster, L, M. Rado and R. Lewis (1983) *Factors Contributing to language Development of Children in Australia with a Non-English Speaking Background*. ERDC Research Report.
- Foster, L, Rado, M and Rowley, G. (1980a) *Success in a Bilingual Programme*. SET 1, Item 2(A).
- Foster, L, Rado, M and Rowley, G. (1980b) *Evaluation of Factors Associated with Success in Bilingual Education*. ERDC Research Report.
- Foster, L., R. Lewis, and M. Rado (1980) *Exploring Students Attitudes in Australia towards Language Maintenance and Bilingual Education*. ERDC Research Report.
- Foster, L., R. Lewis, M. Rado and G. Rowley (1984) *Evaluating Bilingual Education*. Multicultural Australia Papers, No. 29. Melbourne: Clearing House on Migrant Issues.
- Fre Kindergraten Association Multicultural Resource Centre (1989) Parent Information Sheets. Richmond, Victoria.
- Freder, R. and W.E. Lambert (1973) Speech style and scholastic success. In R.W. Shuy (ed.) *Sociolinguistics: Current Trends and Prospects*. Georgetown University Monographs on Language and Linguistics. Washington, D.C: Georgetown University Press.
- Fritsche, M. (1982) *Zur Sprachentwicklung türkischer Kinder in der Bundesrepublik Deutschland*. Sprachpolitische Implikationen und ideologische Elemente in der Bilingualismusforschung. *Osnabrücker Beiträge zur Sprachtheorie* 22: 27-37
- Fritsche, M. (1985) Interkulturelle Kommunikation - ein deutsches Märchen? In J. Rehbein (ed) *Interkulturelle*

- Kommunikation*. Tübingen: Gunter Narr
- Fthenakis, W., A. Sonner, R. Thrul and W. Walbiner, (1985) *Bilingual-bikulturelle Entwicklung des Kindes. Ein Handbuch für Psychologen, Pädagogen und Linguisten*. München: Hueber.
- Garcia, E.E. (1980) The function of language switching during bilingual mother-child interactions. *Journal of Multilingual and Multicultural Development* 1(3) : 243-252
- Garder, A.B (1977) *Bilingual Schooling and the Survival of Spanish in the United States* Rowley, Mass: Newbury House.
- Garder, A.B (1978) Bilingual education: Central questions and concerns. In H. La Fontaine, B. Persky and L.H. Golubchick (eds) *Bilingual Education* Wayne, N.J: Avery.
- Garder, A.B. (1967) *Bilingual Education*. A prepared statement presented to the Special Subcommittee on Bilingual Education of the Committee on Labor and Public Welfare, United States Senate. Washington, D.C.: United States Government Printing Office. (Quoted in G. Lloyd (1977) *Studies of Infant School Children 3—Deprivation and the Bilingual Child*. Oxford: Blackwell.
- Gardner, R.C and W.E. Lambert (1972) *Motivation in Second Language Learning*. Rowley, mass: Newbury House.
- Garner, M. (ed.) (1981) *Community Languages. Their role in education*. Melbourne: River Seine Publications.
- Gass, S. (1988) Integrating research areas: A framework for second language studies. *Applied Linguistics*, Vol.9, no.2, (198-217.
- Gekoski, W.L. 1980) Language acquisition context and language organization in bilinguals. *Journal of Psycholinguistic Research* 9,5:429-49.
- Genesee, F. (1987) *Learning Through Two Languages: Studies of Immersion and Bilingual Education*. Cambridge, MA: Newbury House.
- Genesee, F. (in press) Early bilingual development: one language or two? *Journal of Child Language*
- Genesee, F., G.R. Tucker and W.E. Lambert (1975) Communication skills of bilingual children. *Child Development*, 46, 1010-14.
- Giles, H. (1979) Ethnicity markers in speech. In K. Scherer and H.Giles (eds) *Social Markers in Speech*. Cambridge: C.U.P.

210 References

- Giles, H. and P. Johnson (1981) The role of language in ethnic group relations. In J.C. Turner and H. Giles (eds) *Intergroup Behaviour*. Oxford: Basil Blackwell
- Goethals, M. (1978) Role play in foreign language teaching: A description of the teaching strategy. *International Review of Applied Linguistics* 41-42:87-117.
- Goldman, S., M. Reyes and C. Varnhagen (1984) Understanding fables in first and second languages. *NABE Journal* 3:35-66.
- Goodman, E, Goodman, Y. and Flores, B. (1979) *Reading in the Bilingual Classroom: Literacy and Biliteracy* Rosslyn, Virginia: National Clearing House for Bilingual Education.
- Goodz, N.S. (1987) Parental language mixing in bilingual families. *Journal of Infant Mental Health* 9
- Gorrell, J. (1987) Spatial role-taking ability among bilingual and monolingual kindergarten children. *Journal of Psycholinguistic Research* 16(2) : 91-99
- Gorrell, J., N.J. Bregman, H.A. McAllister and T.J. Lipscomb (1982) A comparison of spatial role-taking in monolingual and bilingual children. *Journal of Genetic Psychology* 1401: 3-10
- Grieve, R., W. Tunmer and C. Pratt (1980) An introduction to the study of language awareness in children. *Education Research and Perspectives*, 7 (1): 5-19
- Grimm, H. (1975) On the child's acquisition of semantic structure underlying the worldfield of prepositions. *Language and Speech*, 18, 97-119.
- Grosjean, F. (1982) *Life with Two Languages: An Introduction to Bilingualism*. Canbridge MA: Harvard University Press.
- Grosjean, F. (1985) The bilingual as a competent but specific speaker-hearer. *Journal of Multilingual and Multicultural Development*, 6(6) 467-477.
- Gudschinsky, S.C (1971) Literacy in the mother tongue and second language learning. *Conference on Child Language, Chicago 1971*. Quebec: International Centre for Research on Bilingualism.
- Guilford, J.P. (1967) Three faces of intellect. In S. Wiseman (ed) *Intelligence and Ability*. Penguin Modern Psychology
- Gumperz, J.J. (1982) Conversational code switching. In *Discourse Strategies*. Cambridge: C.U.P.

- Hakes, D.T. (1980) *The Development of Metalinguistic Abilities in Children*. Berlin: Springer Series in Language and Communication, Vol. 9
- Hakuta, K. (1987) Degree of bilingualism and cognitive ability in Mainland Puerto Rican children. *Child Development* 58: 1372-1388
- Hakuta, K. (1990a) Language and cognition in bilingual children. In A. Padilla, H Fairchild and C. Valadez (Eds.) *Bilingual Education: Issues and Strategies*. Newbury Park: Sage Publications.
- Hakuta, K. (1990b) *Bilingualism and Bilingual Education: A Research Perspective*. Washington: NCBE.
- Hakuta, K. and R.M. Diaz (1985) The relationship between degree of bilingualism and cognitive ability: a critical discussion and some new longitudinal data. In K.E. Nelson (ed) *Children's Language*, Vol. 5. New York: Gardner
- Hamers, J. and M. Blanc (1989) *Bilinguality and Bilingualism*. Cambridge: Cambridge University Press.
- Hannan, W. and Spinoso, G. (1982) *A Mediterranean View of School*. Melbourne: BRUSEC Hodja.
- Hansegård, N.E. (1968) *Tvåspråkighet Eller Halvspråkighet?* Stockholm: Aldus/Bonniers
- Hansen-Bede, L. (1975) A child's creation of second language. *Working Papers on Bilingualism* 6:103-126.
- Harding, E. and P. Riley (1986) *The Bilingual Family. A Handbook For Parents*. Cambridge: C.U.P.
- Harley, B. (1986) *Age in Second Language Acquisition*. San Diego, Cal College-Hill Press.
- Harley, B. and S. Lapkin (1984) The effects of early bilingual schooling on first language development. Ontario Institute for studies in Education (mimeo)
- Harris, J.W. (1984) Study of Insertion Classes under the Commonwealth Ethnic Schools Program. Canberra.
- Harris, J.W. (1986) *Northern Territory Pidgins and the Origin of Kriol*. Pacific Linguistics C-89. Canberra: Australian National University
- Harris, J.W. (1988) North-Australian Kriol - historical perspectives and new directions. *Australian Review of Applied Linguistics* 11(1) : 1-7
- Harris, S. (1980) *Culture and Learning: Tradition and Education*

212 References

- in *North-East Arnhem Land*. Darwin: Northern Territory Education Department.
- Harvey, S. (1974) National language usage among Dutch and Polish immigrant children. In D.E. Edgar (ed.) *Social Change*. Melbourne: Cheshire.
- Hasselmo, N. (1970) Code switching and modes of speaking. In G. Gibert (ed.) *Texas Studies in Bilingualism*, 179-209. Berlin: de Gruyter.
- Haugen, E. (1950) The analysis of linguistic borrowing. *Language*, 26, 210-231.
- Haugen, E. (1953) *The Norwegian Language in America: A Study in Bilingual Behaviour*. Bloomington: Indiana University Press.
- Haugen, E. (1956) *Bilingualism in the Americas*. Alabama: University of Alabama Press.
- Haugen, E. (1972) Bilingualism as a social and personal problem. In R. Filipovic (ed.) *Active Methods and Modern Aids in the Teaching of Foreign Languages*. London: OUP.
- Haugen, E. (1973) Bilingualism, language contact and immigrant languages in the United States: A research report 1956-1970. *Current Trends in Linguistics* 10:505-92.
- Hawkins, E. (1981) *Modern Languages in the Curriculum*. Cambridge: Cambridge University Press.
- Hayes, S. (1980) *Bilingual Programs at Four ACT Primary Schools. Evaluation Report*. Evaluation and Research Section, ACT Schools Authority.
- Hearts, S. (1981) *Ethnic Communities and their Aged*. Richmond: Clearing House on Migration Issues.
- Heath, S.B. (1982) What no bedtime story means: narrative skills at home and at school. *Language in Society* 11: 49-76
- Hoffmann, C. (1985) Language acquisition of two trilingual children. *Journal of Multilingual and Multicultural Development* 6(6) : 449-466
- Hornby, P.A (1977) *Bilingualism*. New York: Academic Press.
- Horvath, B.M (1980) *Community Languages in the Schools*. A Report submitted to the schools Commission. Department of Linguistics, Sydney University.
- Huebner, T. (1983) *A Longitudinal Analysis of the Acquisition of English*. Ann Arbor: Karoma.
- Husband, C. (1982) Ethnic relations and 'British' identity. In Open University, *Race, Identity and British Society*. Milton

Keynes: Open University Press

Husen, T and S. Oppen (eds) (1983) *Multicultural and Multilingual education in Immigrant Countries*. Oxford: Pergamon Press.

Hylstenstam, K. and L. Obler (eds) (1987) *Bilingualism Across the Lifespan: In Health and Pathology*.

Hymes, D. (1967) Models of interaction of language and social setting. *Journal of Social Issues*, 23.2, 8-28.

Ianco-Worrall, A. (1972) Bilingualism and cognitive development. *Child Development* 43: 1390-1400

Imberger, B. (1987) The Role of the Bayswater South and Bayswater West Primary German Programs in language Maintenance. Unpublished Master of Arts Thesis, Monash University.

Imberger, B. (In press) *Education and Science* N°9/10(e). Published by Inter Naciones.

Imedadze, N.V. (1967) On the psychological nature of child speech formation under conditions of exposure to two languages. *International Journal of Psychology* 2: 129-132

International Baccalaureate (1985) *General Guide*. 5th Edition. Geneva: International Baccalaureate Office.

Jarovinskij, A. (1979) On the lexical competence of bilingual children of the kindergarten age groups. *International Journal of Psycho-Linguistics* 6-3 (15):43-57.

Jespersen, O. (1922) *Language: Its Nature, Development and Origin*. London: Allen and Unwin.

John, V.P. and V.M. Horner (1971) *Early Childhood Bilingual Education*. New York: The Modern Language Association of America.

Johnson, W. (1967) Stuttering. In W. Johnson et al., *Speech Handicapped School Children*. New York: Harper and Row

Jorgensen, J.N. et al. (eds) (1988) *Bilingualism in Society and School*. Copenhagen Studies in Bilingualism, Vol 5 Clevedon, Avon: Multilingual Matters.

Kaminskas, G. (1972) Melbourne Spanish. M.A. thesis, Monash University.

Kaplan, R.B. (1972) Cultural thought patterns in inter-cultural education. In Croft, K (ed) *Readings on English as a Second*

- Language. Cambridge, Mass: Winthrop.
- Karmiloff-Smith, A (1979) *A Functional Approach to Child Language*. Cambridge: C.U.P.
- Katchan, O. (1985) Early bilingualism: friend or foe? Paper presented at ALAA, 1985, Brisbane; published in J. Kurcz and G.W. Shugar (eds) *Knowledge and Language*. New York, North Holland: Elsevier Science Publications
- Keats, D.M. and J.A. Keats (1974) The effects of language on concept acquisition in bilingual children. *Journal of Cross-Cultural Psychology* 1: 80-98
- Keats, J.A., D.M. Keats and Liu Fan (1982) The language and thinking relationship in bilingual children. *The Australian Journal of Chinese Affairs* 7: 125-135
- Keller, G.D., R.V. Teschner and S. Viera (eds) (1976) *Bilingualism in the Bicentennial and Beyond*. New York: Bilingual Press
- Kelly, L.G (ed) (1969) *Description and Measurement of Bilingualism. International Seminar on Bilingualism, University of Moncton, 1967*. Toronto: University of Toronto Press.
- Kessler, C. (1971) *The Acquisition of Syntax in Bilingual Children*. Washington, D.C: Georgetown University Press.
- Kessler, C. and M.E. Quinn (1982) Cognitive development in bilingual environments. In B. Hartford, A. Valdman, and R. Foster (eds) *Issues in International Bilingual Education: The Role of the Vernacular*. New York: Plenum Press
- Kessler, C. and M.E. Quinn (1987) Language minority children's linguistic and cognitive creativity. *Journal of Multilingual and Multicultural Development* 8(1) : 173-186
- Kielhöfer, B. and S. Jonekeit (1983) *Zweisprachige Kindererziehung*. Tübingen: Stauffenberg Verlag
- Kilehöfer, B. and S. Jonekeit (1983) *Zweisprachige Kindererziehung*. Tübingen: Stauffenberg Verlag.
- Kipp, S. (1986) Student reaction. In Clyne, M.G (ed).
- Klarberg, M. (1985) Hebrew and Yiddish in Melbourne. In Clyne (ed) (1985)
- Kloss, H. (1966) German-American Language Maintenance Efforts. In J. Fishman (ed.) *Language Loyalty in the United States*. The Hague: Mouton.
- Kolers, P.A. (1966) Reading and talking bilingually. *American Journal of Psychology* 79: 357-376.

- Kolers, P.A. (1968) Bilingualism and information processing. *Scientific American* 218(3):78-86.
- Kouzman, L. (1976) Some patterns and conditions of code-switching from Russian to English. *Talanyá*, 3, 107-116.
- Kouzman, L. (1988) Language use and language maintenance in two Russian communities in Australia. *International Journal of the Sociology of Language* 72: 51-65
- Krashen, S. (1973) Lateralization, language learning, and the critical period: Some new evidence. *Language Learning*, 23, 63-74.
- Krashen, S.D (1979) Adult second language acquisition as post-critical period learning. *International Review of Applied Linguistics* 43:39-52.
- Krashen, S.D (1981) *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon Press.
- Krashen, S.D (1982) *Principles and Practice in Second language Acquisition*. Oxford: Pergamon Press.
- Krashen, S.D (1983) The Input Hypothesis. In Oller, J.W.Jr (ed) *Issues in language Testing Research*. Rowley, Mass: Newbury House.
- Krashen, S.D. and D. Biber (1988) *On Course Bilingual Education's Success in California*. Sacramento, Ca: California Association of Bilingual Education.
- Kupinsky, B. (1983) Bilingual reading instruction in kindergarten. *The Reading Teacher*, Nov., 132-7.
- La Fontaine, H., B. Persky and L. Goluchik (1978) *Bilingual Education*. Wayne, NJ: Avery.
- Labov, W. (1973) The linguistic consequences of being a lame. *Language in Society* 2(1):81-115.
- Labov, W. (1975) *The Study of Non-Standard English*. Urbana: The National Council of Teachers of English.
- Lado, R. (1977) Acquisition and learning in early reading. *Hispania*, 60, 533-5.
- Lado, R. (1987) Early reading and language development with exceptional children. *International Preschool Reading Association Journal*, 1(3) 7-10.
- Lambert, W.E. (1975) Culture and language as factors in learning and education. In A. Wolfgang (Ed.) *Education of Immigrant Children*. Toronto: Ontario Institute for Studies in

Education.

- Lambert, W.E. (1977) The effects of bilingualism on the individual: Cognitive and sociocultural consequences. In P.A. Hornby (Ed.) *Bilingualism: Social and educational Implications*. New York: Academic Press.
- Lambert, W.E. (1977) The effects of bilingualism on the individual: cognitive and sociocultural consequences. In P.A. Hornby (ed) *Bilingualism. Psychological, Social and Educational Implications*. New York: Academic Press
- Lambert, W.E. (1978) Some cognitive and sociocultural consequences of being bilingual. In J. Alatis (ed.) *Georgetown University Round Table on Languages and Linguistics (1978, 214-219*. Washington: Georgetown University Press.
- Lambert, W.E. (1985) Some cognitive and social consequences of being bilingual. In J.E. Alatis and J.J. Staczek (Eds.) *Perspectives on Bilingualism and Bilingual Education*. Washington: Georgetown University Press.
- Lambert, W.E. and E. Anisfeld (1969) A note on the relationship of bilingualism and intelligence. *Canadian Journal of Behavioural Science* 1: 123-128
- Lambert, W.E. and G.R. Tucker (1972) *Bilingual education of Children: The St Lambert Experiment*. Rowley, MA: Newbury House.
- Lambert, W.E. and R.C. Gardner, H.C. Barik and K. Tunstall (1962) Attitudinal and cognitive aspects of intensive study of a second language. *Journal of Abnormal and Social Psychology* 66:358-368.
- Landry, R.G. (1974) A comparison of second language learners and monolinguals on divergent thinking tasks at the elementary school level. *The Modern Language Journal* 58: 10-15
- Lasonen, K. and P. Toukomaa (1978) *Linguistic Development and School Achievement Among Finnish Immigrant Children in Mother Tongue Medium Classes of Bilingual Education*. University of Jyväskylä, Department of Education, Research Report No. 70
- Lenneberg, E.H. (1967) *Biological Foundations of Language*. New York: Wiley.
- Leontiev, A.A. (1981) *Psychology and the Language Learning*

- Process. Oxford: Pergamon Press
- Leopold, W. (1939) *Speech Development of a Bilingual Child: A Linguist's Record* (Vol. 1): Vocabulary growth in the first two years. Evanston: Northwestern University Press
- Leopold, W. (1947) *Speech Development of a Bilingual Child: A Linguist's Record* (Vol. 2) : Sound learning in the first two years.. Evanston: Northwestern University Press
- Leopold, W. (1949a) *Speech Development of a Bilingual Child: A Linguist's Record* (Vol. 3) : Grammar and general problems in the first two years. Evanston: Northwestern University Press
- Leopold, W. (1949b) *Speech Development of a Bilingual Child: A Linguist's Record* (Vol. 4) : Diary from age two. Evanston: Northwestern University Press
- Leopold, W. (1954) A child's learning of two languages. *Georgetown University Monograph Series on Language and Linguistics* 7: 19-30
- Leopold, W. (1957-8) American children can learn their German mother tongue. *The American-German Review* , 24, 4-6
- Levelt, W.J.M., A. Sinclair and R.J. Jarvella (1978) Causes and functions of linguistic awareness in language acquisition: Some introductory remarks. In Sinclair, Jarvella and Levelt (eds)
- Lewins, F. (1980) Ethnic schools and multiculturalism in Australia. *Journal of Intercultural Studies* 1(2)30-39.
- Lewis, E.G. (1975) The Comparative Study of Bilingualism in Education: A Model and Prospective of Research. Paper presented at the Bilingual Symposium, Linguistic Society of America, Annual Meeting. San Francisco, Cal, mimeo.
- Lewis, G. (1978) Types of bilingual communities. In J.E. Alatis (Ed.) *International Dimensions of Bilingual Education*. Georgetown University Round Table on Languages and Linguistics 1978. Washington: Georgetown University Press.
- Lewis, R, M. Rado and L. Foster (1982) Secondary school students' attitudes towards ethnic language bilingual learning in schools. *Australian Journal of Education* 292-304.
- Lewis, R, M. Rado and L. Foster (1983) A neglected issue in language policy in Australia: The students' view. *Journal of Intercultural Studies* 4(1):21-37.

- Liedtke, W.W. and D. Nelson (1968) Concept formation and bilingualism. *Alberta Journal of Educational Research* 14(4) : 225-232
- Lindholm, K.J. and A.M. Padilla (1977) Bilingual children's use of language mixing and switching. In C.A. Henning (ed) *Proceedings of the Los Angeles Second Language Research Forum*, UCLA
- Lindholm, K.J. and A.M. Padilla (1978) Language mixing in bilingual children. *Journal of Child Language* 5: 327-335
- Lo Bianco J. (1987) *National Policy on Languages*. Canberra: Australian Government Publishing Service.
- Lo Bianco, J (1989) *Languages Action Plan*. Victoria: Ministry of Education.
- Luria, A.R. (1961) *The Role of Speech in the Regulation of Normal and Abnormal Behaviour*. New York: Liveright
- Mackey, W.F. (1965) Bilingual interference: Its analysis and measurement. *Journal of Communication* 15.
- Mackey, W.F. (1971) A typology of bilingual education. In Anderson, T and M. Boyer *Bilingual Schooling in the United States*, Vol 2 Washington DC: Government Printing Office.
- Mackey, W.F. and N. von Beebe (1977) *Bilingual Schools for a Bicultural Community: Miami's Adaptation to the Cuban Refugees*. Rowley, Mass: Newbury House.
- Mackey, W.F. and T. Andersson (eds) (1977) *Bilingualism in Early Childhood*. Rowley, Mass.: Newbury House
- Mackiewicz, G. and P.K. Kee (1986) Intergroup attitudes and behaviour in Adelaide. Paper presented at National Research Conference on Ethnicity and Multiculturalism, University of Melbourne, May
- MacNamara, J. (1967) The bilingual's linguistic performance - a psychological overview. *Journal of Social Issues*, 23, 58-77.
- MacNamara, J. (1971) Linguistic independence of bilinguals. *Journal of Verbal Learning and Verbal Behavior*, 10, 480-7.
- Macnamara, J. (1966) *Bilingualism and Primary Education*. Edinburgh: University Press
- Macnamara, J. (1972) Bilingualism and thought. In B. Spolsky (ed) *The Language Education of Minority Children: Selected Readings*. Rowley, MA: Newbury House

- Malakoff, M. (1988) The effect of language instruction on reasoning in bilingual children. *Applied Psycholinguistics* 9:17-38.
- Marjoribanks, K (1980) *Ethnic Families and Children's Achievements*. Sydney: Allen and Unwin.
- Marjoribanks, K (1981) Ethnicity, socialization and children's achievement at school. *New Education* 2,3(1):105-119.
- Martin-Jones, M. and S. Romaine (1985) Semilingualism: a half-baked theory of communicative competence. *Applied Linguistics* 7(1) :26-38
- McClure, E. (1981) Formal and functional aspects of code switched discourse in bilingual children. In R.P. Duran (ed) *Latino Language and Communicative Behaviour*. Norwood, NJ: Ablex
- McGill, G. (1980) Bilingual Education in the Northern Territory. In T. Lê, and M. McCausland (eds) *Proceedings of the Conference Child Language Development: Theory into Practice , September (1980 , (195-205. Launceston: Launceston Teachers Centre.*
- McKirnan, D. and E. Hamayan (1984) Speech attitudes towards outgroup members: a test of a model in a bicultural context. *Journal of Language and Social Psychology*, 1, 21-38.
- McLaughlin, B. (1978; 2nd ed 1984) Simultaneous acquisition of two languages in childhood. In *Second Language Acquisition In Childhood*. Hillsdale, NJ: Lawrence Erlbaum Associates
- McNamara, T.F. (1988a) Language and relations between ethnic groups. Social psychological perspectives. In T.J. Quinn and T.F. McNamara, *Issues in Second Language Learning: General and Particular*. Geelong, Vic.: Deakin University Press
- McNamara, T.F. (1988b) Language and social identity: Israelis abroad. In W.B. Gudykunst (ed) *Language and Ethnic Identity*. Clevedon, Philadelphia: Multilingual Matters
- Meisel, J. (1986) Word order and case marking in early child language. Evidence from simultaneous acquisition of two first languages: French and German. *Linguistics* 24: 123-183
- Meisel, J. (1987) Early differentiation of languages in bilingual children. In Hylstenstam and Obler (eds)
- Meisel, J.M., H. Clahsen and M. Pienemann (1981) On determining developmental sequences in second language acquisition. *Studies in Second Language Acquisition* 3: 109-135.

- Mikes, M. (1967) Aquisition des catégories grammaticales dans le langage de l'enfant. *Enfance* 20: 289-298
- Mikes, M. and P. Vlahovic (1966) Razvoj gramaticickik kategorija u decjem govoru. [quoted by B. McLaughlin 1978]
- Miller, N (ed.) (1984) *Bilingual Education in Australian Schools*. Australian Education Review 18. Melbourne: Australian Council for Educational Research.
- Ministry of Education, Victoria (1987) Language Choice Kit. Support Material for LOTE Framework, Languages Other Than English. Melbourne: Curriculum Branch, Ministry of Education, Victoria.
- Ministry of Education, Western Australia (1988) Languages for Western Australians. Report of the Ministerial Working Party on the Development of a Policy for the Teaching of Languages Other Than English (LOTE) in Western Australian Schools, Perth.
- Moutsos-Stergiopoulos, B (1983) The Creek Bilingual Pilot Project. *Journal of Intercultural Studies* 4(2):67-71.
- Myhill, M.E. and M.L. Herriman (1980) The educational implications of language awareness. *Language Awareness in Children*. 7(1):102-12.
- NAATI (National Association for the Accreditation of Translators and Interpreters) (1986) *National Directory of Translators, Interpreters and Language Aides*. Canberra: National Accreditation Authority for Translators and Interpreters.
- NAFLaSSL (National Assessment Framework for Languages at the Senior Secondary Level) (1987) *National Assessment Framework for Languages at Senior Secondary Level*. Adelaide: Senior Secondary Assessment Board of South Australia.
- NESB (Non-English Speaking Background) Parnet Participation Support Material (1989) *Frameworks Blueprints for the Future*. Statewide Multicultural Education Coordination Unit, Ministry of Education, Victoria.
- Nicholas, H.R. (1985) Constraints on Second Language Learning: What Influences What can be Taught? School of Education, La Trobe University, mimeo.
- Norst, M.J. (1982) National Ethnic School Survey. Report with Recommendations, unpublished.

- Oksaar, E. (1973) Implications of language contact for bilingual language acquisition. Paper presented at the International Congress of Anthropological and Ethnographical Sciences (9th, Chicago, Ill., August-September)
- Oksaar, E. (1976) Code switching as an interactional strategy for developing bilingual competence. *Word* 27: 377-385
- Oksaar, E. (1977) Personal communication quoted in Toll (1977).
- Oller, J.W. Jr. (1983) Evidence for a general proficiency factor: An expectancy grammar. In J.W. Oller Jr (ed.) *Issues in Language Testing Research* Rowley, Mass: Newbury House.
- Padilla, A. and E. Liebman (1975) Language acquisition in the bilingual child: a descriptive analysis of the linguistic structures of Spanish/English speaking children. In Keller, Teschner and Viera (eds)
- Padilla, A.M. (1978) The acquisition of fourteen English grammatical morphemes in the speech of bilingual children. *Bilingual Review* 5(3): 163-168
- Padilla, A.M. and K.J. Lindholm (1976) Development of interrogative, negative and possessive forms in the speech of young Spanish/English bilinguals. *Bilingual Review* 3(2): 122-152
- Paradis, M. (ed) (1978) *Aspects of Bilingualism*. Columbia: Hornbeam Press
- Past, A. (1976) Preschool Reading in Two Languages as a Factor in bilingualism. Ph.D. thesis, University of Texas at Austin.
- Past, A. and K. Past (1978) Early childhood: the best time to become bilingual and biliterate. *Childhood Education*, 54 (3) 155-161.
- Past, K. (1976) A case of preschool reading and speaking acquisition in two languages. In R. Lado and T. Anderson (eds) *Georgetown University Papers on Languages and Linguistics*, 58-73. Washington: Georgetown University Press.
- Paulston, C.B. (1975) Ethnic relations and bilingual education: Accounting for contradictory data. *Working Papers on Bilingualism* 8:1-44
- Paulston, C.B. (1982) *Swedish Research and Debate about Bilingualism*. Stockholm: National Swedish Board of Education.

- Pauwels, A. (1980) The Effects of Mixed Marriages on Language Shift in the Dutch Community in Australia. M.A. thesis, Monash University, Melbourne.
- Pauwels, A. (1986a) Attitudes and reactions to code-switching and other interference phenomena as expressed by Dutch migrants in Australia. An exploratory study. Paper presented at ALS/ALAA Combined Congress, Adelaide, August.
- Pauwels, A. (1986b) *Immigrant Dialects and Language Maintenance in Australia: The Case of Limburgs and Swabian*. Dordrecht, Foris
- Pauwels, A. (1988) Diglossic communities in transition: the cases of the Limburgs and Swabian communities in Australia. *International Journal of the Sociology of Language* 72: 85-99
- Peal, E. and W.E. Lambert (1962) The relation of bilingualism to intelligence. *Psychological Monographs* 76:1-23.
- Pedersen, K.M. (1987) German minority children in the Danish border region: code switching and interference. *Journal of Multilingual and Multicultural Development* 8(1-2) : 111-120
- Penfield, W. and L. Roberts (1959) *Speech and Brain Mechanisms*. Princeton: Princeton University Press.
- Phillip Institute of Technology (1984) *Review of the Commonwealth Multicultural Education Program: Report and Conclusion*, Vol 1. Canberra: Commonwealth Schools Commission.
- Piaget, J. (1929) *The Child's Conception of the World*. London: Routledge and Kegan Paul
- Piaget, J. (1955) *The Language and Thought of the Child*. Cleveland, Ohio: World Publishing
- Pienemann, M. (1983) Learnability of Syllabus Construction. First version of a paper, mimeo.
- Pienemann, M. (1984) The Effect of Instruction on Learners' Orientation in L2 Acquisition. The University of Sydney, mimeo.
- Piestly, T. (1980) Homonymy in child phonology. *Journal of Child Language* , 7, 413-427.
- Poplack, S. (1980) Sometimes I'll start a sentence in Spanish Y TERMINO EN ESPAÑOL: towards a typology of code switching. *Linguistics* 18: 581-618

- Porsché, D. (1978) Urteile und Vorurteile über Zweisprachigkeit im Kindesalter. *Linguistik und Didaktik* 23: 179-189
- Porsché, D. (1983) *Die Zweisprachigkeit während des primären Spracherwerbs*. Tübingen: Gunter Narr Verlag
- Price, C. and P. Pyne (1977) The immigrants. In A. Davies et al. (eds) *Australian Society. A Sociological Introduction*, 331-355. Melbourne: Longman Cheshire.
- Pye, C. (1986) One lexicon or two? An alternative interpretation of early bilingual speech. *Journal of Child Language* 13: 591-593
- Rado, M (1977) Bilingual education. In L.F. Claydon, T. Knight, and M. Rado (eds) *Curriculum and Culture*. Sydney: Allen and Unwin.
- Rado, M. (1971) Bilingualism and Learning. Paper presented at the Conference on the Educational Problems of Migrant Children. La Trobe University, mimeo.
- Rado, M. (1972) Bilingual Education with Special Reference to the Multilingual Centre Research Project. Paper presented at the national Seminar on migrants and their Communication Needs. Monash University, mimeo.
- Rado, M. (1973) Language in the Curriculum. In Claydon, L.F. et al. *Renewing Urban Teaching*. London: Cambridge University Press.
- Rado, M. (1975) Slobin's operating principles and second language learning *Working Papers in Language and Linguistics* 1(2): 39-50.
- Rado, M. (1976) Language Use of Bilingual Adolescents: Self Appraisal. In M.G. Clyne (ed.)
- Rado, M. (1980) Bilingual Materials and their Use. In D.J. Phillips and J. Houston (ed) *Identity, Communication Decision Making*. Australian Multicultural Society. Identity, Communication, Decision Making. Melbourne: Drummond.
- Rado, M. (1980) *Multilingual Project: Objectives and Development*. Melbourne: La Trobe University.
- Rado, M. (1980) Pragmatics and Bilingual Texts in Language Learning. Paper presented at the Fifth National Congress of the Applied Linguistics Association of Australia, Monash University.
- Rado, M. (1984a) *Teaching in the Multilingual Classroom*. Canberra: Curriculum Development Centre.

- Rado, M. (1984b) The Place of Community Languages in Victorian Schools. Position paper commissioned by the joint Ministerial Policy Committee/State Board of Education project to develop a language Policy for Victoria, mimeo.
- Rado, M. (1985a) Study of Insertion Classes Funded under the Commonwealth Ethnic Schools Program: A Critique. Paper prepared for the Catholic Education Office, Western Australia.
- Rado, M. (1985b) The Language of Migrant Parents and their Children: An Interlanguage Perspective. Paper presented at the Annual Conference of the Australian Association of Speech and Hearing: Professional Management: Client, Practice and Self, Melbourne.
- Rado, M. (ed.) (1974) *Bilingual Education*. Proceedings of a Conference Held at La Trobe University. Occasional Paper by the Centre for the Study of Teaching and Human Interaction, La Trobe University. Also ERIC Microfiche ED140638.
- Rado, M. and A. Gowers (1988) Child Interlanguage English Myths or Reality? Paper Presented at the Australian Early Childhood Association 18th National Conference, Canberra.
- Rado, M. and C. Reynolds (1988) Language Curriculum in a Multicultural Society. paper Presented at the 16th FIPLV World Congress on Language Teaching, Canberra.
- Rado, M. and L. Foster (1984) Implications of language Use and language Policy for Members of Non-English Speaking Families in Australia. *Proceedings, Policies and Families* 4:177-209. Melbourne: Institute of Family Studies.
- Rado, M. and L. Foster (1985) The Language of Migrant Parents and their Children: An Interlanguage Perspective. Paper presented at the Australian Association of Speech and Hearing Annual Conference, Melbourne.
- Rado, M. and L. Foster (1986) Family Language Use as a Data Base for Implementing Language Education Policies. Papers presented at the Second Australian Family Research Conference, Melbourne.
- Rado, M. and L. Foster (1986) The language of migrant parents, their children and Anglo-Celtic peers: An interlanguage perspective. *Working Papers on Migrant and Intercultural Studies*. Monash University.

- Rado, M. and L. Foster (1986a) The Language Environment of Children with Non-English Speaking Background. Paper presented at Ethnicity and Multiculturalism National Research Conference, Melbourne.
- Rado, M. and L. Foster (1986b) Migrant children's language, parental and peer language environment and their implications in the Australian intercultural context. *Australian Review of Applied Linguistics* 9(1):62-91.
- Rado, M. and L. Foster (1987) "I am not prejudiced but..." In A. Markus and R. Rasmussen (eds) *Prejudice in the Public Arena: Racism. (Working Papers in Migrant and Intercultural Studies.)* Melbourne.
- Rado, M. and R. Lewis (1980) Exploring student attitudes in Australia towards ethnic language maintenance. *International Review of Applied Linguistics* 49-59:117-136.
- Rado, M. and R. Lewis (1980) The Language Needs of our Adolescent Students as Perceived by Themselves. Paper presented at the Thirteenth Annual Congress of the Applied Linguistics Association of Australia, Launceston.
- Rado, M., L. Foster and D. Bradley, D. (1986) *English Language Needs of Migrant and Refugee Youth*. Canberra: AGPS.
- Rado, M., L. Glezer and L. Foster (1986) *Ethnic Students at La Trobe University: A Pilot Study*. Bundoora: Institute of Immigration and Ethnic Studies, La Trobe University.
- Raffler-Engel, W. (1965) Del bilinguismo infantile. *Archivo Glottologico Italiano* 50:175-180
- Ramirez, A.G. (1985) *Bilingualism through Schooling: Cross-Cultural Education for Minority and Majority Students*. Albany: State University of New York Press.
- Ramirez, M.M. and A. Castaneda (1974) *Cultural Democracy, Bicultural Development and Education*. New York: Academic Press.
- Redlinger, W.E. and T.-Z. Park (1980) Language mixing in young bilinguals. *Journal of Child Language* 7: 337-352
- Reid, H (1988) The Feasibility of Bilingual Education in the ACT, mimeo.
- Reynolds, C. and M. Rado (1989) Evaluating LOTE programs: Who needs to know? *ACE Newsletter*, forthcoming.
- Richards, J.C. (1970) *A Non-Contrastive Approach to Error Analysis*. Quebec: International Centre for Research on Bilingualism.

- Ronjat, J. (1913) *Le développement du langage observé chez un enfant bilingue*. Paris: Librairie Ancienne H. Champion.
- Rosenblum, T. and S.A. Pinker (1983) Word magic revisited: monolingual and bilingual children's understanding of the word-object relationship. *Child Development* 54: 773-780
- Rosier, P. and M. Farella (1976) Bilingual education at Rock Point- Some early results. *TESOL Quarterly*, 10(4) 379-88.
- Rubichi, R. (1983) Planning and implementation of a bilingual program: Italian in South Australia. *Journal of Intercultural Studies* 4:37-54.
- Rubichi, R. (n.d) *Bilingual Education. A South Australian Experience. The Report of the Bilingual Appraisal Project*. Adelaide: Ministry of Education.
- Rubino, A. (1987) Code mixing and code control in Italo-Australian children. *Australian Review of Applied Linguistics*, Series S, No.4: 128-153.
- Ruke-Dravina, V. (1965) The process of acquisition of apical /r/ and uvular /R/ in the speech of children. *Linguistics* 17: 56-68
- Ruke-Dravina, V. (1967, *Mehrsprachigkeit im Vorschulalter* . Lund: Gleerup.
- Saer, D. (1923) The effect of bilingualism on intelligence. *British Journal of Psychology*. 14:25-38.
- Sandefur, J. (1985) Aspects of the socio-political history of Ngukurr (Roper River) and its effects on language change. *Aboriginal History* 9(2) : 205-219
- Santos, P. (1984) Biliteracy and language development in low-income Spanish-speaking preschool children. Ph.D. dissertation. Washington: Georgetown University.
- Saunders, G. (1982) *Bilingual Children: Guidance for the Family*. Clevedon: Multilingual Matters
- Saunders, G. (1984a) An interview with a Turkish-English bilingual, *Bilingual Family Newsletter*, 1(2) 3.
- Saunders, G. (1988) *Bilingual Children: From Birth to Teens*. Clevedon: Multilingual Matters
- Saunders, G. (1984b) Listening to your children read can make them better readers, *Bilingual Family Newsletter*, 1(3) 4.
- Saunders, G. (1985) The monolingual versus the bilingual view of bilingualism as seen by François Grosjean, *Bilingual Family Newsletter*, 2(2) 2-3.

- Saunders, G.(1986a) Health workers and bilingual families, *Bilingual Family Newsletter*, 3(1) 5-6.
- Saunders, G.(1986b) Teaching children to read at home - a look at some of the literature, *Bilingual Family Newsletter*, 3(2) 3-4.
- Saunders, G.(1987) The benefits of community language instruction: Recent research, *Migration Monitor*, Year 2, No.4, Jan., 9-10.
- Saunders, G.(1989) The development of bilingual children's weaker language in a one parent-one language family: from birth to teens. To appear in J. Rehbein (ed.) *Dimensions of Bilingual and Bicultural Development*, Clevedon: Multilingual Matters.
- Saville, M. (1973) *Bilingual Children*. Washington, DC: Centre for Applied Linguistics.
- Saville, M. and R. Troike (1971) *A Handbook of Bilingual Education*. Washington: TESOL.
- Schmidt, A. (1985) *Young People's Dyirbal. An example of language death from Australia*. Cambridge: CUP.
- Schnitzer, M. (1978) Cerebral lateralization and plasticity: their relevance to language acquisition. In M. Paradis (ed.) *Aspects of Bilingualism*. Columbia: Hornbeam Press.
- Schools Commission (1975) *Report for the Triennium 1976-78 Chapter 8: The Education of Migrant Children*. Canberra: AGPS.
- Scott, S. (1973) The relation of divergent thinking to bilingualism: cause or effect. McGill University, Montreal (mimeo)
- Scovel, T. (1969) Foreign accents, language acquisition, and cerebral dominance. *Language Learning*, 245-53.
- Segalowitz, N. (1977) Psychological perspectives on bilingual education. In B. Spolsky and R. Cooper (eds) *Frontiers of Bilingual Education*. Massachusetts: Newbury House.
- Sharp, D. (1973) *Language in Bilingual Communities*. London: Edward Arnold.
- Shnukal, A. (1983) Torres Strait Creole: the growth of a new Torres Strait language. *Aboriginal History* 7(1-2): 173-185
- Shnukal, A. (1985) The spread of Torres Strait Creole to the Central Islands of Torres Strait. *Aboriginal History* 9(2): 220-234
- Simoes, A. (1976) *The Bilingual Child Research and Analysis of Existing Educational Themes*. New York: Academic Press.

- Sinclair, A., R.J. Jarvella and W.J.M. Levelt (eds) (1978) *The Child's Conception of Language*. Berlin: Springer Verlag
- Skutnabb-Kangas and R. Phillipson (1985) Support for bilingualism in the family. *Sproglæringen*, Dec.
- Skutnabb-Kangas, T. (1975) Bilingualism, semilingualism and school achievement.
- Skutnabb-Kangas, T. (1978) Semilingualism and the education of migrant children as a means of reproducing the caste of assembly line workers. In N. Dittmar et al. (ed) *Papers From the First Scandinavian-German Symposium On the Language of Immigrant Workers and Their Children*. Roskilde
- Skutnabb-Kangas, T. (1980) *Guest worker or immigrant? - Different ways of reproducing an underclass*. Rolig-Paper Roskilde Universitetscenter, Denmark. Paper No. 21:4-52.
- Skutnabb-Kangas, T. (1981) *Bilingualism or Not: The Education of Minorities*. Clevedon: Multilingual Matters.
- Skutnabb-Kangas, T. and J. Cummins (eds) (1988) *Minority Education*. Clevedon, Avon: Multilingual Matters.
- Skutnabb-Kangas, T. and P. Toukomaa (1976) *Teaching migrant children's mother tongue and learning the language of the host country in the context of the socio-cultural situation of the migrant family*. The Finnish National Commission for UNESCO, Helsinki
- Slobin, D.I. (1973) Cognitive prerequisites for the development of grammar. In Ferguson and Slobin (eds)
- Slobin, D.I. (1975) The more it changes... On understanding language by watching it move through time. *Papers and Reports on Child Language Development* 10:1-39.
- Slobin, D.I. (1978) A case study of early language awareness. In A. Sinclair, R.J. Jarvella, W.J.M. and Levelt (eds) *The Child's Conception of Language*. Berlin: Springer.
- Slobin, D.I. (ed.) (1985) *The Crosslinguistic Study of Language Acquisition*, Vols 1 & 2 Hillsdale, NJ: Lawrence Erlbaum.
- Smolicz, J.J. (1979) *Culture and Education in a Plural Society*. Canberra: Curriculum Development Centre.
- Smolicz, J.J. (1979) *Culture and Education in a Plural Society*. Canberra: Curriculum Development Centre.
- Smolicz, J.J. (1984) Minority languages and the core values of culture: changing policies and ethnic response in Australia.

Journal of Multilingual and Multicultural Development
5(1) : 23-41

- Smolicz, J.J. and M.J. Secombe (1977) A study of attitudes to the introduction of ethnic languages and culture in Australian schools. *Australian Journal of Education* 21(1):1-24.
- Smolicz, J.J. and R. Harris (1976) Ethnic languages and immigrant youth. In M.G. Clyne (ed.).
- Smolicz, J.J. and R. Harris (1977) Ethnic languages in Australia. *International Journal of the Sociology of Language*, 14, 89-108.
- Snow, C. (1987) Beyond conversation: Second language learners' acquisition of description and explanation. In J. Lantolf and A. Labarca (Eds.) *Research in Second Language Learning: Focus on the classroom*. Norwood NJ: Ablex.
- Snow, C.E. (1983) Literacy and language: relationships during the pre-school years. *Harvard Educational Review* 53: 165-189
- South Australian Education Department (1987) Languages Other Than English Development Plan 1987-95 (Draft).
- Spolsky, B. (ed) (1986) *Language Education in Multicultural Settings*. Clevedon, Avon: Multilingual Matters.
- Spolsky, B. and R.L. Cooper (eds) (1977) *Frontiers of Bilingual Education*. Rowley, Mass: Newbury House.
- Spolsky, B. and R.L. Cooper (eds) (1978) *Case Studies in Bilingual Education*. Rowley, Mass: Newbury House.
- Spolsky, B. and W. Holms (1971) Bilingualism in the Six-Year-Old Navajo Child. In *Conference on Child Language, Chicago 1971*. Quebec, International Centre for Research on Bilingualism.
- Spring, G (1980) Bilingual and Bicultural Education in the Northern Territory. Paper presented at ANZAAS, Adelaide.
- State Conference on Teacher Education (1985) *Reports and Recommendations on Teacher Education for English as a Second Language, Community Languages and Bilingual Education* Melbourne: Child Migrant Education Services.
- Stern, H.H. (1967) *Foreign Languages in Primary Education*. London: Oxford University Press.
- Stern, H.H. (1974) What can We Learn from the Good Language Learner? Paper presented at the Ontario Modern Language Teachers' Association 88th Annual Spring Conference, mimeo.

- Stoffel, G. (1983/84) Veränderungen und semantische Konflikte im Anredeverhalten Deutschsprachiger in Neuseeland. *Muttersprache*, 94, 185-193.
- Stolt, B. (1964) *Die Sprachmischung in Martin Luthers Tischreden: Studien zum Problem der Zweisprachigkeit*. Stockholm: Stockholmer Germanistische Forschungen.
- Sussex, R. (1980) The phonetic interference of Australian English in Australian Polish. *International Review of Slavic Languages*, 5, 3/4.
- Swain, M. (1972) Bilingualism as a First Language. Ph.D. thesis, Irvine, CA: University of California
- Swain, M. (1977) Bilingualism, monolingualism and code acquisition. In W. Mackey and T. Andersson (eds)
- Swain, M. (1979) Bilingual education research and its implications. In C.A. Yorio, K. Perkins and J. Schachter (eds) *On TESOL '79: The Learner in Focus*. Washington, DC: TESOL
- Swain, M. (1981) Time and timing in bilingual education. *Language Learning* 31(1):1-15.
- Swain, M. (1984) A review of immersion education in Canada. In P. Allen and M. Swain (eds) *Language Issues and Education Policies*. Oxford: Pergamon Press.
- Swain, M. (1986) Communicative competence: some roles of comprehensible input and comprehensible output in its development. In J. Cummins and M. Swain *Bilingualism in Education*. London and New York: Longman.
- Swain, M. and H.C. Barik (1975) *Five Years of Primary French Immersion. Annual Reports of the Bilingual Education Project, up to 1975*. Toronto, Ontario: OISE.
- Swain, M. and J. Cummins (1979) Bilingualism, cognitive functioning and education. In *Language Teaching and Linguistics Abstracts*. Cambridge: C.U.P.
- Swain, M. and J. Cummins (1979) Bilingualism, cognitive functioning and education. *Language Teaching and Linguistics Abstracts* 12(1):4-18.
- Swain, M. and M. Wesche (1973) Linguistic interaction: Case study of a bilingual child. *Working Papers on Bilingualism* 1:11-34.
- Swain, M. and M. Wesche (1975) Linguistic interaction: case study of a bilingual child. *Language Sciences* 17: 17-22
- Swain, M. (ed) (1972) *Bilingual Schooling*. Toronto, Ontario: OISE.

- Syllabus Development Project (1988) *A Syllabus for the 1990s*. London: The Institute of Linguists.
- Søndergard, B. (1981) Decline and fall of an individual's bilingualism. *Journal of Multilingual and Multicultural Development*, 2(4) 297-302.
- Taeschner, T. (1982) *The Sun Is Feminine. A Study on Language Acquisition in Bilingual Children*. Berlin: Springer Verlag
- Tajfel, H. (1981) *Human Groups and Social Categories*. Cambridge: C.U.P.
- Tajfel, H. (1982) Social psychology of intergroup relations. *Annual Review of Psychology* 33: 1-39
- Tajfel, H. and A.L. Wilkes (1963) Classification and quantitative judgement. *British Journal of Psychology* 54: 101-114
- Tajfel, H. and J. Turner (1979) An integrative theory of intergroup conflict. In W.G. Austin and S. Worchel (eds) *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks/Cole
- Taylor, M.M. (1974) Speculations on bilingualism and the cognitive network. *Working Papers on Bilingualism* 2: 68-124
- Thiéry, C. (1976) Le bilinguisme vrai. *Études de linguistique appliquée*, 24, 52-63.
- Thomas, C.H. and J.L. Thomas (eds) (1982) *Bilingual Special Education Resource Guide*. Phoenix, AZ: Oryx Press.
- Thomas, J. (1983) Cross-cultural pragmatic failure. *Applied Linguistics*, 4(2) 91-112.
- Timm, L. (1975) Spanish-English code-switching: El Porqué y How-Not-To. *Romance Philosophy*, 14, 473-82.
- Toll, C. (1977) Frühe Zweisprachigkeit im Unterricht und die deutschen Auslandsschulen. *Zielsprache Deutsch*, 2, 15-24.
- Torrance, E.P., J.-J. Wu, J.C. Gowan and N.C. Aliotti (1970) Creative functioning of monolingual and bilingual children in Singapore. *Journal of Educational Psychology* 61(1): 72-75
- Totten, G.O. (1960) Bringing up children bilingually. *American-Scandinavian Review* 48: 42-50
- Toukoma, P. and T. Skutnabb-Kangas (1977) *The Intensive Teaching of the Mother Tongue to Migrant Children of Pre-School Age And Children in the Lower Level of*

- Comprehensive School*. Helsinki: The Finnish National Commission for UNESCO
- Troile, R.C. and N. Modiano (eds) (1975) *Proceedings of the First Inter-American Conference on Bilingual Education*. Arlington, Virginia: Centre for Applied Linguistics.
- Trueba, H.T. and C. Barnett-Mizrahi (eds) (1979) *Bilingual Multicultural Education and the Professional*. Rowley, Mass: Newbury House.
- Tucker, R. (1970) An alternative days approach to bilingual education. In J.E. Allatis (ed) *Georgetown University Round Table on Languages and Linguistics, Bilingualism and Language Contact*. Washington, DC: Georgetown University Press.
- Tunmer, W.E. and J.A. Bowey (1980a) The Development of Word Segmentation Skills. Paper presented at the national Conference on Child Development, University of Western Australia.
- Tunmer, W.E. and J.A. Bowey (1980b) The role of linguistic awareness in a theory of reading acquisition. *Education Research and Perspectives* 7(1):80-101.
- Tunmer, W.E. and M.E. Myhill (1984) Metalinguistic awareness in bilingualism. In W.E. Tunmer, C. Pratt and M.L. Herriman (eds) *Metalinguistic Awareness in Children: Theory, Research and Implications*. Berlin: Springer Series in Language and Communication, Vol. 15
- Tunmer, W.E., C. Pratt, C. and M.L. Herriman (eds) (1984) *Metalinguistic Awareness in Children: Theory, Research and Implications*. Berlin: Springer.
- van IJzendoorn, M.H., R. van der Veer and S. van Vliet-Visser (1987) Attachment three years later: relationships between quality of mother-infant attachment and emotional/cognitive development in kindergarten. In L.W.C. Tavecchio and M.H. van IJzendoorn (eds) *Attachment in Social Networks: Contributions to the Bowlby-Ainsworth Attachment Theory*. Amsterdam and New York: Elsevier
- VCE (Victorian Certificate of Education) (1988) *Languages Other Than English (LOTE) Field of Study Draft Study Design*. Victorian Curriculum and Assessment Board.
- Veljeskov, H. (1988) A critique of the distinction between

- 'academic' and 'communicative' language from a pragmatic point of view. In A. Holmen et al. (eds) *Bilingualism and the Individual*. Copenhagen Studies in Bilingualism, Vol 4. Clevedon, Avon: Multilingual Matters.
- Vihman, M. (1985) Language differentiation by the bilingual infant. *Journal of Child Language* 12:297-324
- Vihman, M. (1986) More on language differentiation. *Journal of Child Language* 13: 595-597
- Volterra, V. and T. Taeschner (1978) The acquisition and development of language by bilingual children. *Journal of Child Language* 5: 311-326
- Von Raffler-Engel, W. (1965) Del bilinguismo infantile. *Archivio Glottologica Italiano*, 50, 175-80.
- Von Raffler-Engel, W. (1970) The concept of sets in a bilingual child. In *Actes du X^e Congrès International des Linguistes*. Vol. III. Bucharest: Romanian Academy Press.
- Vygotsky, L.S. (1962) *Thought and Language*. Cambridge, MA: M.I.T. Press.
- Watts, B.H., W.J. McGrath, and J.L. Tandy (1973) *Bilingual Education in 'in Aboriginal Communities in the Northern Territory*. Canberra: Department of Education.
- Weigt, M. (1985) Bilingualer Fachunterricht. Möglichkeiten sonderpädagogischer und sprachpädagogischer Förderung türkischer Schüler in einer 6. Klasse der Schule für Lernbehinderte. *Arbeiten zur Mehrsprachigkeit*, 4. Universität Hamburg, Germanisches Seminar/Deutsch als Fremdsprache.
- Weinreich, U. (1953) *Languages in Contact*. The Hague: Mouton
- Wells, G. (1985a) *Language Development in the Pre-School Years*. Cambridge: C.U.P.
- Wells, G. (1985b) Pre-school literacy related activities and success in school. In D. Olson, A. Hildyard and N. Torrance (eds) *Literacy, Language and Learning*. Cambridge: C.U.P.
- Wells, G. (1986) *The Meaning Makers*. Portsmouth, NH: Heinemann
- Wiseman, R. (1985) *The Childhood of an Ideal: Italian in South Australian State Primary Schools*. Faculty of Education and Humanities, South Australian College of Education.

234 References

- Yu, A. and B. Bain (1985) *Language, Social Class and Cognitive Style: A Comparative Study of Unilingual and Bilingual Education in Hong Kong and Alberta*. Education and Research Studies No 1, Hong Kong Teachers Association.

NATIONAL LANGUAGES INSTITUTE OF AUSTRALIA

240